

# COMMERCIAL FISHERIES REVIEW



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# COMMERCIAL FISHERIES REVIEW

A review of developments and news of the fishery industries  
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## NORTH PACIFIC ALBACORE TUNA EXPLORATION, 1952

By Edward A. Schaefer\*

### SUMMARY

To gain information on the migration pattern and the habits of albacore tuna (*Thunnus germon*), the John N. Cobb explored the offshore waters of northern California, Oregon, and Washington from June 16 to August 8. The first albacore was caught on June 24--525 miles west of Trinidad Head, California. Water temperatures of 57° F. and over were not located in the area off Cape Blanco during the first phase of the 1952 exploration. In 1950 and 1951 warm water was prevalent in this

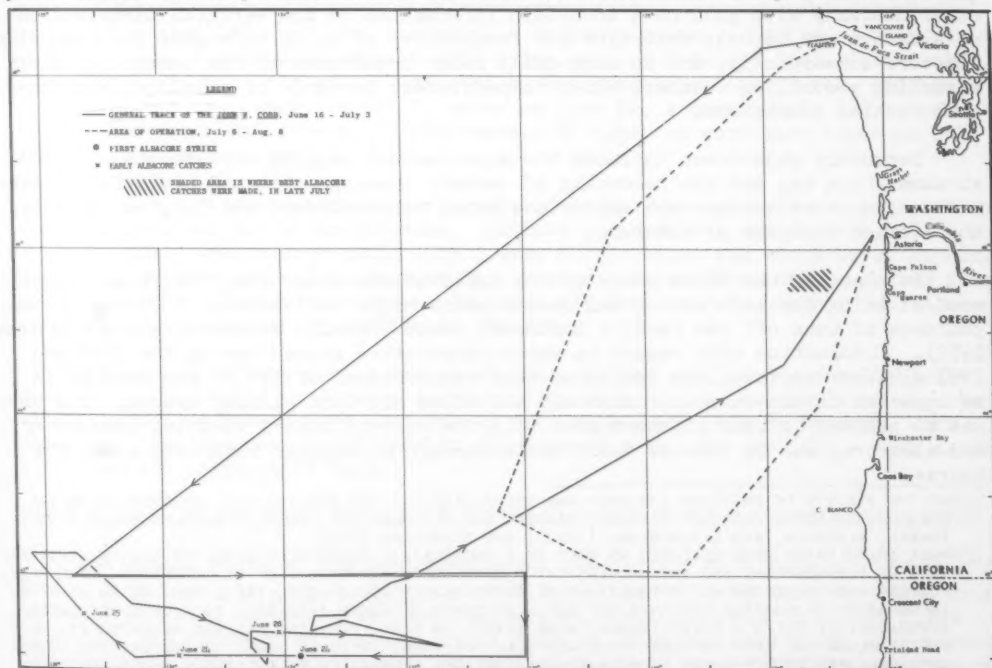


FIG. 1-- AREA OF OPERATION BY THE JOHN N. COBB DURING THE 1952 ALBACORE EXPLORATION

area at the same time of the year. Results of fishing efforts during the first phase of the 1952 exploration were slightly better than 1951, but poor when compared with 1950 results. Favorable water temperatures (57° F. and over) were found in most areas after the first of July 1952.

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Result of the second phase of the 1952 exploration were as poor as the results of the 1951 exploration, as contrasted with good results obtained during this phase of the 1950 exploration. The only concentration of albacore encountered by the John N. Cobb during the 1952 exploration was in a small area between Cape Mears and Cape Falcon, Oregon. In 1951 the only concentration of albacore was encountered in late July in the vicinity of the explosives dumping area off Tillamook Head, Oregon. But in 1950 signs of schooling were noted during the second week of July and good concentrations of albacore were found off Grays Harbor on July 19 and off Cape Flattery during the last few days of July.

The 1952 commercial albacore landings in the states of Oregon and Washington amounted to approximately 2,744,000 pounds--the lowest in the past 15 years.

### OBJECTIVES AND PLAN OF 1952 EXPLORATION

The fourth<sup>1/</sup> in a series of investigations to gain information on the migration pattern and the habits of albacore tuna (Thunnus germon) in the northeastern Pacific Ocean was conducted with the Service's exploratory fishing vessel John N. Cobb from June 16 to August 8, 1952, in the offshore waters of northern California, Oregon, and Washington.

The main objectives of the 1952 exploration were: to attempt to intercept albacore early in the season off the Oregon coast and trace their movements into areas of commercial exploitation; to gain fishing information in the offshore waters and compare the results with those obtained in the previous years; to fish experimentally with gill nets to obtain information on the vertical distribution of albacore and to help determine the feasibility of using this gear for capturing albacore commercially; and to make daily radio broadcasts to the commercial fleet regarding prevailing weather, water temperatures, presence of albacore, and general fishing conditions.

Secondary objectives included the experimental tagging of albacore with a streamer-type tag and the recording of certain oceanographic and biological observations, such as surface and subsurface water temperatures, and lengths, weights, and stomach analyses of albacore.

In planning the first phase of the exploration, water temperature was considered as being the main ecological factor which might influence or indicate the appearance of tuna off the Pacific Northwest coast (Powell, Alverson, and Livingstone 1952). Information with regard to water temperature gained during the 1950 and 1951 albacore explorations indicated that temperatures of 57° F. and over could be expected in mid-June approximately 400 miles off Cape Blanco, Oregon. The plan was to proceed to this offshore area with the expectation of locating warm water and albacore, and to release 5,000 drift cards<sup>2/</sup> at regular intervals along the course.

1/FOR THE RESULTS OF PREVIOUS EXPLORATIONS AND HISTORICAL AND STATISTICAL INFORMATION ON THE OREGON-WASHINGTON ALBACORE FISHERY READERS ARE REFERRED TO: POWELL AND HILDEBRAND (1950); POWELL, ALVERSON, AND LIVINGSTONE (1952); AND SCHAEFERS (1952).

2/THESE DRIFT CARDS WERE RELEASED AS PART OF A COOPERATIVE EXPERIMENT WITH THE SCRIPPS INSTITUTION OF OCEANOGRAPHY AND THE UNIVERSITY OF WASHINGTON DEPARTMENT OF OCEANOGRAPHY. THE MAIN PURPOSE WAS TO DETERMINE IF THIS TYPE OF DRIFT OBJECT WOULD BE SUITABLE FOR USE IN GAINING INFORMATION ON SURFACE CURRENTS OFF THE WEST COAST OF NORTH AMERICA. EACH OF THESE CARDS, APPROXIMATELY 3-1/4 X 5-1/2 INCHES, WERE PLACED IN A POLYETHYLENE BAG AND WEIGHTED AT ONE END TO ALLOW THE CARD TO FLOAT IN A VERTICAL POSITION. VESSELS FROM THE COOPERATING AGENCIES RELEASED 15,000 CARDS BY MID-JULY AT STATIONS FROM A FEW MILES TO 500 MILES OFFSHORE AND FROM BRITISH COLUMBIA, CANADA, TO BAJA CALIFORNIA, MEXICO. RESULTS OF THIS EXPERIMENT ARE BEING ANALYZED BY THE SCRIPPS INSTITUTION OF OCEANOGRAPHY.



## RESULTS OF FIRST PHASE (JUNE 16-JULY 3) OF 1952 EXPLORATION

Trolling operations commenced on June 19 approximately 500 miles west of Cape Blanco, Oregon, soon after the last of the drift cards were released. Surface water temperatures varied from 54.5° F. to 56° F. in this area. In an attempt to locate more favorable tuna water (57° F. and above) the John N. Cobb headed on an easterly course along the 42nd parallel from a position approximately 600 miles off the coast. Surface water temperatures varied from 55.5° F. to 56.5° F. to a position 260 miles offshore. At this point the vessel turned south

Table 1 - Brief Comparisons of Certain Data for the First Phase (June 16-July 3) of 1950, 1951, and 1952 Albacore Explorations

	1950	1951	1952
Weather (wind)	Variable southerly to northerly direction. Usually force 5 or under.	Predominately northerly direction. Usually force 6 or under.	Variable southerly to northerly direction. Usually force 5 or under.
Surface water temperatures	57°-F. surface water first encountered on June 17 approximately 345 miles off Cape Blanco, Oregon	57°-F. surface water first encountered on June 14 approximately 370 miles off Cape Blanco, Oregon	57°-F. surface water first encountered on June 22, 270 miles west of Trinidad Head, California
First albacore encountered	June 18 by trolling at position 42°12' N., 135°05' W.	June 29 by trolling at position 43°48' N., 134°52' W.	June 24 by trolling at position 40°59' N., 133°44' W.
Number of albacore strikes	44	1	9
Number of albacore caught	33	None	6

to the 41st parallel, and then headed on a westerly course. Surface temperatures of 57° F. were recorded on June 22--270 miles west of Trinidad Head, California. A gradual warming of the water was noted as the vessel continued west, and the first albacore was caught in 58°-F. water on June 24, approximately 525 miles west of Trinidad Head, California. Small numbers of albacore were also taken in this area on June 25 and June 28.

On July 1, a general north-northeasterly course was taken from a position on the 42nd parallel 345 miles offshore. Surface temperatures varied from 56° F. to 56.5° F. along this course until July 2 when 58°-F. water was encountered approximately 170 miles west of Winchester Bay, Oregon. Water temperatures varied from 58° F. to 60° F. from this point to 25 miles off Cape Falcon, Oregon. No albacore were taken on this inshore portion of the trip.

Weather conditions during the first phase of the trip were generally quite favorable. Southerly winds were present until June 22, and northerly winds, usually of moderate force, were encountered from then until July 3; however, warm water was found farther south than at the same time in 1950 and 1951. (See table 1 for certain comparative data.)

## RESULTS OF SECOND PHASE (JULY 6-AUGUST 8) OF 1952 EXPLORATION

The second phase of the exploration was carried out from July 6<sup>3/</sup> to August 8. During this time the John N. Cobb explored for albacore in an area extending from the 42nd parallel northward to Cape Flattery at distances from 30 to 255 miles offshore. No albacore were caught until July 11, when two were taken approximately 175 miles off Cape Blanco, Oregon. Five albacore were caught in this same general area on July 12. Results were negative from that date until July 24, when 27 albacore were taken between Cape Mears and Cape Falcon, Oregon, at distances from 40 to 72 miles offshore. A gill-net set during the night of the 24th failed to

3 JULY 4 AND 5 WERE SPENT IN ASTORIA OBTAINING SUPPLIES.

produce any albacore. Trolling results in this area from July 25 to July 29 varied from 4 to 89 albacore per day, with an average catch of 30 per day. The majority of these fish were taken at a distance of 43 to 52 miles off Cape Mears.

During the remainder of the trip, fishing operations were carried on from Cape Mears to Cape Flattery, and only a few scattered fish were taken between

Table 2 - Brief Comparisons of Certain Data for the Second Phase (July 6-August 8) of 1950, 1951, and 1952 Albacore Explorations			
	1950	1951	1952
Surface water temperatures	Generally favorable, 57° F. and over	Generally favorable, 57° F. and over	Generally favorable, 57° F. and over
First albacore encountered	July 8 in gill nets at position 43°07' N., 127°00' W.	July 14 in gill nets at position 43°57' N., 126°30' W.	July 11 by trolling at position 42°07' N., 128°27' W.
Concentrations of albacore encountered	By July 16 good catches being made by commercial fleet 60 miles southwest of Columbia. John N. Cobb encountered good concentrations of albacore off Grays Harbor on July 19, and off Cape Flattery during the last few days of July.	The only concentration of albacore encountered was in a rather restricted region in the vicinity of the explosives dumping area off Tillamook Head during the latter part of July.	The only concentration of albacore encountered was in a small area between Cape Mears and Cape Falcon during the latter part of July.
Fishing results	Generally good	Generally poor	Generally poor
Stomach contents of albacore	Predominately juvenile rockfish in numbers up to 167 per stomach.	Predominately juvenile rockfish in numbers up to 30 per stomach.	Predominately juvenile rockfish in numbers up to 46 per stomach.

the Columbia River and Willapa Bay. A gill-net set 30 miles off Cape Falcon on the night of August 5 captured two albacore. Results of the second phase of the 1952 exploration were poor as contrasted with good results obtained during this phase of the 1950 exploration (table 2).

The 1952 commercial albacore landings in Oregon and Washington amounted to approximately 2,744,000 pounds<sup>4</sup>—the lowest in the past 15 years.

#### GEAR USED AND ITS EFFECTIVENESS

Two types of fishing gear were used during the 1952 albacore exploration: (1) conventional surface-trolled jigs and (2) gill nets. Trolling was usually carried on from before daylight to after dark. The two gill-net sets were made at night.

**TROLLING GEAR:** The trolling gear was of the same specifications as that used during the 1950 exploration of the John N. Cobb (Powell, Alverson, and Livingstone 1952). Tension blocks (Schaefer 1952) were used as shock absorbers on both stern lines and on the port inside and middle lines in place of coiled springs, and comparative records of strikes in relation to fish landed were maintained. The lines rigged with tension blocks retained 6 percent more fish than the lines rigged with the conventional coiled springs (table 3). But the experimental data are insufficient to term this difference significant.

Table 3 - Comparison of Fishing Results of Lines With and Without Tension Blocks					
No Tension Blocks			Tension Blocks		
Starboard Inside and Middle Lines			Port Inside and Middle Lines		
Strikes	Caught	Percent	Strikes	Caught	Percent
68	43	63	65	49	75
Starboard and Port Tip Lines			Starboard and Port Stern Lines		
81	58	72	63	43	68

<sup>4</sup>PRELIMINARY STATISTICS SUPPLIED BY THE MARKET NEWS SERVICE, U. S. FISH AND WILDLIFE SERVICE; DO NOT INCLUDE IMPORTED ALBACORE.

Various types of lures were used, including plastic jigs of assorted colors, plastic-headed

jigs with red-and-white feathers, rubber squids,  $1\frac{1}{2}$ -ounce Japanese red-pearl-eyed jigs with red-and-white feathers, and catalyn-head jigs with colored plastic skirts.

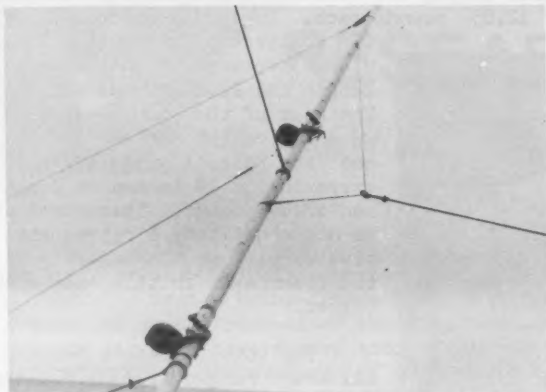


FIG. 2 - TENSION BLOCKS ON THE PORT TROLLING POLE OF THE JOHN N. COBB. A COILED SPRING ALLOWS THE LINE TO PAY OUT UNDER TENSION WHEN THE ALBACORE STRIKE, THUS REDUCING THE INITIAL IMPACT.

The nets were fished in the following manner: eight shackles were tied together and fished in a string. Four of the shackles were 50 meshes deep, and four were 100 meshes deep. The four 50-mesh shackles were: one nylon,  $7\frac{1}{2}$  inches stretched measure; one linen,  $8\frac{1}{2}$  inches; one nylon,  $8\frac{1}{2}$  inches; and one linen,  $9\frac{1}{2}$  inches. The four 100-mesh shackles were of the same material and mesh sizes as the 50-mesh shackles.

Lack of albacore limited the testing of gill nets and precluded obtaining data on the effectiveness of this gear as a means of gaining information on vertical distribution and as a possible method of capturing albacore commercially.

Only two gill-net sets were made, both in the area off Cape Falcon. The first of these, on the night of July 24, captured only two blue shark (*Prionace glauca*) and one mackerel shark (*Lamna ditropis*). The second set on the night of August 5 captured 2 albacore, 7 hake (*Merluccius productus*), 2 soupfin shark (*Galeorhinus zyopterus*), 2 Dall porpoise (*Phocoenoides dalli*), 1 thresher shark (*Alopias vulpinus*), 1 jack mackerel (*Trachurus symmetricus*), 2 blue shark, and 1 mackerel shark.

Although all lines and lures took fish when schools of albacore were encountered, single fishbit the lures on the longer outside lines more often than those on the shorter inside lines. During the best day's fishing on July 26, when most of the albacore were taken from small schools, 29 strikes were noted on the stern lines; and on the lines from the poles, 22 strikes were on inside lines, 55 on the middle lines, and 33 on the tip or outside lines.

**GILL NETS:** The gill nets were in 50-fathom shackles of either linen or nylon webbing, with mesh sizes of  $7\frac{1}{2}$ ,  $8\frac{1}{2}$ , and  $9\frac{1}{2}$  inches, stretched measure (Powell, Alverson, and Livingstone 1952).

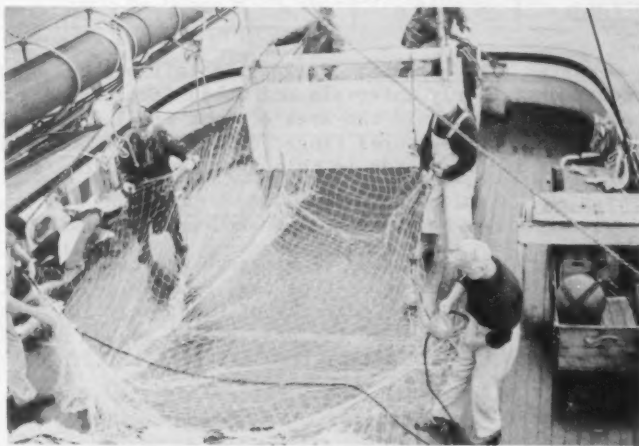


FIG. 3 - CLEARING AND STOWING THE NYLON GILL NET ABOARD THE JOHN N. COBB. THE NET IS SET FROM THE STERN BIN WHILE THE VESSEL MOVES AHEAD SLOWLY.

## MISCELLANEOUS OBSERVATIONS

SIZE OF ALBACORE: Albacore taken during the first phase of the exploration averaged 25.73 inches in length and 12.85 pounds each. During the second phase,

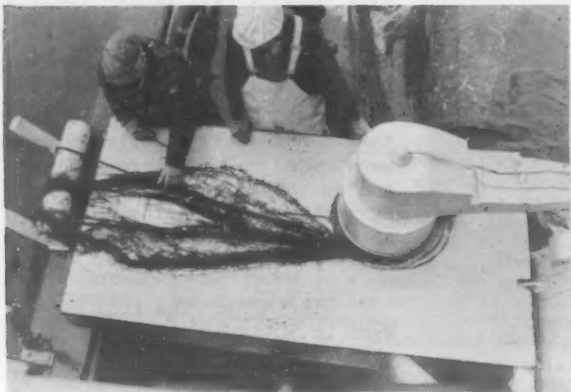


FIG. 4 - REMOVING AN ALBACORE FROM THE LINEN GILL NET. THE NET IS PICKED UP ON THE STARBOARD SIDE AMIDSHIP. EXPERIMENTAL FISHING WITH GILL NETS WAS LIMITED IN 1952 BY THE VERY POOR RUN OF ALBACORE.

the scattered fish taken off Cape Blanco averaged 25.50 inches in length and 12.21 pounds each. The rest of the fish measured and weighed (caught between Cape Mears and Cape Falcon) were larger, averaging 28.48 inches in length and 17.80 pounds. These probably do not constitute a representative sample, as the majority of the fish taken in this area were tagged.

The total albacore taken in all areas ranged from 24.80 inches to 36.42 inches in length, with an average length of 27.79 inches, and from 10.50 to 34.00 pounds, with an average weight of 16.53 pounds.

FOOD OF ALBACORE: Saury and squid were the predominate food items found in albacore stomachs in the area off Trinidad Head and Cape Blanco. Juvenile rockfish were noted in the stomach of one albacore taken off Cape Blanco. In the area between Cape Mears and Cape Falcon, small rockfish, the majority of which were *Sebastes alutus* from 1½ to 3 inches in length, made up the bulk of the diet. Of 28 albacore stomachs examined in this area, juvenile rockfish were noted in 21; saury, in 1; squid, in 1; and 7 were empty. The juvenile rockfish were found in numbers varying from 1 to 46 per stomach.

WATER TEMPERATURES: During the entire trip, surface water temperatures were recorded at hourly intervals and subsurface temperatures were taken daily with a bathythermograph. In the area of best fishing (between Cape Mears and Cape Falcon), the surface temperatures ranged from 58.5° F. to 60° F. The warm layer (57° F. and above) of surface water in this area averaged 66 feet in depth.

## TAGGING OF ALBACORE

Experimental tagging of albacore was carried out aboard the vessel using a flexible plastic streamer-type tag, 8 mm. wide, 34 mm. long, and less than 1 mm. thick. Because of the scarcity of fish, only 147 albacore were tagged and released. Most fish were tagged at the base of the second dorsal; and the remainder, at the base of either the right or the left pectoral fin. To date none of these tags has been returned.

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### Progress on Projects, August 1953

**REFRIGERATION: Freezing Fish at Sea, Defrosting, Filleting, and Refreezing the Fillets:** **LABORATORY:** Further studies were carried out on the penetration of salt into the meat of brine-frozen haddock prepared under commercial operating conditions and on the removal of the absorbed salt during the thawing process. Haddock were frozen at sea aboard the Delaware in a 22-to 23-percent salt (sodium chloride) solution at temperatures of 6° F. to 8° F. The large haddock remained in the refrigerated brine for 3 hours; the scrod haddock for 1½ hours. The thawed samples were prepared by immersing the fish in running fresh water held at 60° F. ( $\pm 5^\circ$ ). The large haddock were held in the thawing water for 3½ hours; the scrod haddock for 2 hours. The results are shown in the following table:

Salt Content of Unthawed and Thawed Brine-Frozen Haddock					
Sample		Salt Content <sup>2/</sup>			
		First ¼-inch of Meat		Second ¼-inch of Meat	
Fish	Condition	Range	Average	Range	Average
		Percent	Percent	Percent	Percent
Brine-Frozen Large Haddock <sup>1/</sup>	Unthawed	1.19-1.67	1.4	0.18-0.27	0.22
	Thawed <sup>2/</sup>	0.35-0.68	0.43	0.17-0.25	0.19
Brine-Frozen Scrod Haddock <sup>3/</sup>	Unthawed	1.02-1.15	1.1	0.17-0.24	0.21
	Thawed <sup>4/</sup>	0.25-0.36	0.32	0.18-0.24	0.21
<sup>1/</sup> HELD IN 22-23 PERCENT SALT SOLUTION AT 6° F. TO 8° F. FOR 3 HOURS. <sup>2/</sup> IMMERSED IN RUNNING FRESH WATER AT 60° F. ( $\pm 5^\circ$ ) FOR 3½ HOURS. <sup>3/</sup> HELD IN 22-23 PERCENT SALT SOLUTION AT 6° F. TO 8° F. FOR 1½ HOURS. <sup>4/</sup> IMMERSED IN RUNNING FRESH WATER AT 60° F. ( $\pm 5^\circ$ ) FOR 2 HOURS. <sup>5/</sup> RESULTS OF ANALYSES OF SIX GROUPS FROM EACH SAMPLE. EACH GROUP CONSISTED OF THREE FISH.					

**VESSEL:** Experimental lots of frozen fish were prepared and the modified brine-freezing mechanism was tested under operating conditions at sea during the Delaware's five-day cruise (July 23-25). Fishing operations were carried out by the Service's technological research vessel on the southeast part of Georges Bank. On this cruise (Technological Cruise No. 21) all freezing was done in a mixed magnesium-chloride and sodium-chloride brine, permitting the use of a freezing temperature of about -5° F. This is about 10 degrees lower than can be safely attained with the refrigeration equipment using a straight sodium-chloride brine. A substantial decrease in freezing time for both scrod and large haddock was possible at this low temperature. Approximately 14,000 pounds of scrod and large haddock were frozen in-the-round in this mixed brine. Half of the total was glazed in sea water and the remainder left unglazed. The frozen fish were then stored at 0° F. in the vessel's hold. When the vessel docked, these fish were placed in commercial cold storage to determine the effect of the mixed brine on storage characteristics of the fish. Small lots of several other varieties of fish were also frozen in this brine.

(Boston)



**COMPOSITION OF FISH: Abalone:** During the Southeastern Alaska abalone investigation in September 1951, representative samples of abalone (*Haliotes kamtschaticana*) from three fishing grounds off the west coast of Prince of Wales Island were collected. These were packed in cans, frozen, and stored at 0° F. for storage tests and for later chemical analysis. Results of the proximate analyses are given in the following table:

Source of Abalone	Proximate Composition of Abalone Meat				
	Moisture	Protein	Oil	Ash	Carbohydrate <sup>1</sup>
	Percent	Percent	Percent	Percent	Percent
Kelly Cove.....	77.5	17.5	0.7	1.7	2.6
Lulu Island.....	76.8	17.4	0.7	1.7	3.4
Blanquigal Point..	76.6	16.3	0.6	1.8	4.7

<sup>1</sup>/BY DIFFERENCE.

(Ketchikan)



### FALL BRINGS OVEN DINNERS

The first crisp, cool days of autumn signal the time for oven dinners--when you can pop your whole dinner into the oven and have a hearty, savory meal for your family.

One of the best tasting and least expensive combinations of food is baked cod fillets and baked potatoes. Tender flaky fish and hot buttered baked potatoes just naturally go together. Perhaps you would like to bake your dessert at the same time. Deep-dish apple pie or peach cobbler are two suggestions. To complete your meal, add a tossed salad and your family's favorite beverage.

Allow 45 minutes to an hour for baking your potatoes and dessert. Half an hour before the potatoes and dessert are done, put your cod fillets into the oven.

As a suggestion for your oven dinner, the home economists of the U. S. Fish and Wildlife Service recommend Cod Fillets Baked in Spanish Sauce.

#### COD FILLETS BAKED IN SPANISH SAUCE

2 POUNDS COD FILLETS	1 TEASPOON SALT
1/4 CUP ONION, CHOPPED	1/2 TEASPOON SUGAR
3 TABLESPOONS BUTTER OR OTHER FAT, MELTED	DASH OF PEPPER
2 TABLESPOONS FLOUR	1 BAY LEAF
1/4 CUP GREEN PEPPER, CHOPPED	1 WHOLE CLOVE
2 CUPS CANNED TOMATOES	

Cook onion in fat until tender. Blend in flour. Add all remaining ingredients except fish and cook until thick, stirring constantly. Remove bay leaf and clove. Arrange fillets in a shallow well-greased baking dish and cover with sauce. Bake in a moderate oven, 350° F., for 25 to 30 minutes or until fish flakes easily when tested with a fork. Garnish and serve hot. Serves 6.



# TRENDS AND DEVELOPMENTS

## Additions to the Fleet of U. S. Fishing Vessels

A total of 76 vessels of 5 net tons and over received first documents as fishing craft during May 1953—28 less than in May 1952. Washington led with 20 vessels, followed by Texas with 11 vessels, and Louisiana with 8 vessels, according to the Bureau of the Customs.

Vessels Issued First Documents as Fishing Craft, May 1953 and Comparative Data					
Section	May		January-May		Total
	1953	1952	1952	1952	1952
	Number	Number	Number	Number	Number
New England .....	7	4	10	10	30
Middle Atlantic .....	3	4	9	16	26
Chesapeake .....	2	8	25	27	65
South Atlantic .....	11	4	40	33	89
Gulf .....	27	4	92	43	161
Pacific .....	25	57	65	109	203
Great Lakes .....	-	-	5	4	13
Alaska .....	1	23	17	70	88
Total .....	76	104	263	312	675

NOTE: VESSELS HAVE BEEN ASSIGNED TO THE VARIOUS SECTIONS ON THE BASIS OF THEIR HOME PORT.



## California Develops New Mid-Water Trawl

An almost untouched zone of the Pacific Ocean has been opened to commercial fishing and research by a new mid-water trawl developed and perfected by the California Department of Fish and Game, an August 5 release from that agency states.

Using a giant net towed behind a powerful State marine research vessel, fishing at almost any desired depth in the ocean was possible. Until now, most ocean fishing has been concentrated in two zones—near the surface and along the bottom.

The assistant chief of the Department's marine fisheries branch reports that the trawl is being used to find out what kinds of fish, and how many, are in this salty "no man's land." Studies are planned for the life histories of many species, including unknown chapters in the ocean life of the young salmon.

While operations with the mid-water type of trawl are not new, having been conducted in Europe and Canada among other places, this modification is believed to have produced the first successful results with commercial-sized gear in California waters.

The new device, which can be used with standard otter-trawl gear, operates on the same principle as the parachute. Four quarter doors, or small kite-like deflectioners at the corners of the net, are forced outward as the net is towed through the water. Pulling against each other, they stretch the mouth of the net tight. The

modification eliminates the fish-scaring bridle which runs in front of the ring-type net and earlier adaptations of the mid-water trawl. Only the amount of cable available limits the depth at which the new rig can be towed.

From the research vessel N. B. Scofield, State workers have already made successful catches of rockfish, hake, black cod, and other middle-depth fish.



## Cans--Shipments for Fishery Products, January-June 1953



Total shipments of metal cans for fish and sea food during January-June 1953 amounted to 47,584 short tons of steel (based on the amount of steel consumed in the manufacture of cans), compared to 43,916 short tons shipped during the same period in 1952. Increased canning of tuna in California accounts for some of this year's increase to date.

NOTE: STATISTICS COVER ALL COMMERCIAL AND CAPTIVE PLANTS KNOWN TO BE PRODUCING METAL CANS. REPORTED IN BASE BOXES OF STEEL CONSUMED IN THE MANUFACTURE OF CANS, THE DATA FOR FISHERY PRODUCTS ARE CONVERTED TO TONS OF STEEL BY USING THE FACTOR: 23.0 BASE BOXES OF STEEL EQUAL ONE SHORT TON OF STEEL.



## Federal Purchases of Fishery Products

FRESH AND FROZEN FISHERY PRODUCTS PURCHASED BY DEPARTMENT OF THE ARMY--APRIL, MAY, AND JUNE 1953: For the military feeding of the U. S. Army, Navy, Marine Corps, and Air Force, the Army Quartermaster Corps in April 1953 purchased 1,455,915 pounds (valued at \$654,757) of fresh and frozen fishery products; in May, a total of 3,124,176 pounds (valued at \$1,183,404); and in June, a total of 4,648,870 pounds (valued at \$1,696,864). April purchases were 48.9 percent less in quantity than for the same month in 1952, but May and June purchases were greater by 24.0 and 16.5 percent, respectively.

Purchases of Fresh and Frozen Fishery Products by Department of the Army (April, May, and June 1953 and Comparative Data)				
Period	Quantity		Value	
	1953 Lbs.	1952 Lbs.	1953 \$	1952 \$
April .....	1,455,915	2,849,408	654,757	1,316,859
May .....	3,124,176	2,518,736	1,183,404	1,180,951
June .....	4,648,870	3,989,047	1,696,864	1,743,593
January-April .....	5,826,872	9,716,797	3,125,183	4,546,503
January-May .....	8,951,048	12,235,533	4,308,587	5,727,454
January-June .....	13,599,918	16,224,580	6,005,451	7,471,047

Purchases of fresh and frozen fish by the Army Quartermaster Corps for the first six months in 1953 amounted to 13,599,918 pounds (valued at \$6,005,451), a drop of 16.2 percent in quantity and 19.6 percent in value as compared with the same period in 1952.

The over-all average prices paid in 1953 for fresh and frozen fishery products by the Quartermaster Corps were: April 45.0 cents per pound, May 38.2 cents, and June 36.5 cents. The 1952 prices for the same months were: 46.2, 46.9, and 43.7 cents per pound, respectively.

In addition to the purchases of fresh and frozen fishery products indicated above, the Armed Forces generally makes some local purchases which are not included in the above figures. Therefore, actual purchases are somewhat higher than indicated, but it is not possible to obtain data on the local purchases made by military installations throughout the country.



## Maryland

CRAB MORTALITIES IN CHESAPEAKE BAY DUE TO LOW OXYGEN IN WATER: Crab mortalities in crab pots placed in 15 feet or greater depths of water and in certain soft-crab shedding pounds situated in sheltered areas in shallow water in the Chesapeake Bay area apparently are due to a low oxygen content in the water, according to a biologist of the Maryland Department of Research and Education. "Nature, not man, is responsible for these kills," he said.

He stated that the localized mortalities which affect the Bay's blue crab population in summer recurred during the second and third weeks of July 1953. This period was characterized climatically by rather high temperatures, light winds, and in some localities, by exceptionally low tides. During this period crab fishermen reported dead crabs in crab pots in considerable numbers. Biologists, and investigators of the Chesapeake Bay Institute of the Johns Hopkins University, believe that the influx of the deep low oxygen waters that occurs during summer months in the Bay, on to the shallower bottoms where the pots are set, is responsible for the crab kill.

Certain soft-crab shedding pounds suffered rather large losses at the same time. Situated as they are in sheltered, shallow areas where wave action is kept down by natural wind breaks or by board fences constructed for the purpose, the pounds (sel-don in waters deeper than eight feet) were the location of high mortalities and were attributed also to low oxygen content in the water.

Investigators of the Chesapeake Bay Institute and Chesapeake Biological Laboratory of the Maryland Department of Research and Education found the following conditions at one crab pound: (a) three or four days of light winds preceded the kill; (b) high temperatures prevailed; and (c) low tides



BLUE CRAB

and very shallow water occurred. Although the normal depth of water was about five feet, the depth at the time of the mortality was less than two feet. The crabs enclosed by the floats are confined to the upper 8 to 10 inches of this depth. "The combination of all these factors contributed to a high death rate among the impounded crabs," one biologist stated.

The crab biologist commented further, "Disregarding the presence of green crabs in the floats, the investigations indicate that the conditions, although stemming from different causes in the crab pots and in the soft crab pounds, are fundamentally the same." In the crab pots, the crabs suffer from a lack of oxygen in the deeper waters because there is no mixing of the oxygenated surface waters due to the thermal stratification which occurs in summer months. In the crab pounds, low oxygen affects the crabs which are crowded in small floats in shallow, quiet, warm wa-

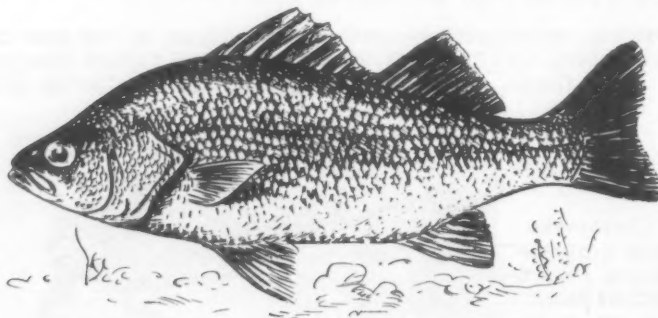
ters. The high temperatures decrease the water's ability to hold oxygen in a dissolved state while at the same time increasing the oxygen requirements of all living organisms in the water. He concluded: "Therefore, with little aeration of the water being accomplished by wave action coupled with an increased oxygen demand, it follows that an oxygen shortage must develop with the subsequent ill effects upon the populations of animals present."

Many of the spectacular fish kills recorded in late spring and fall in Chesapeake Bay waters are probably due to the effects of natural conditions described above. Crab mortalities while less spectacular can affect the livelihood of watermen rather seriously. It is probable that nothing can be done to prevent the recurrence of the conditions, but a prediction of impending mortalities might be of considerable value.

\* \* \* \* \*

WHITE PERCH TAGGED: White perch, the silver-hued pan-sized native of Chesapeake tributaries, lives a very circumscribed existence, according to a preliminary analysis of tags returned to Maryland's Chesapeake Biological Laboratory at Solomons. Last spring 3,000 white perch were tagged in the Patuxent River system; 10 percent were recaptured by fishermen. A reward of 50 cents was paid for each numbered tag, reports the Maryland Department of Research and Education.

With the exception of those fish traveling over 60 miles from the mouth of the river during spawning season to a point above tidewater, white perch seem to be a home-loving fish, rarely moving great distances during the summer and autumn. Not one has been recaptured in Chesapeake Bay proper, according to a biologist of the Maryland Department of Research and Education at Solomons, although one was taken at the very mouth of the River at Little Cove Point. Tagging returns indicate that white perch seem to be restricted generally to specific tributaries.



WHITE PERCH (MORONE AMERICANA)

At least, 2,700 tagged white perch, potentially worth \$1,350, remain at large in the Patuxent River system below Priests Bridge, awaiting an angler or commercial netter. Fishermen are urged to look out for fish with plastic disks about the size of a dime attached to the back under the top fin. Two tags, colored a bright yellow and red, are attached to the fish by means of a straight pin, inserted directly into the flesh below the dorsal fin.

The study is designed to determine (a) distances and speed which they travel from one locality to another; (b) movements during the summer months; and (c) fishing pressure upon the different year classes. Since scale samples have been taken from each fish that was tagged, the age can be ascertained by examining the scale for growth rings or annuli that are formed in winter each year. Thus it is imperative for each fisherman upon catching a marked white perch to send in his tag immediately for the reward with the following information: (a) exact locality where fish was captured; (b) date and time of capture; and (c) type of gear used to land the fish.

Send all tags to Chesapeake Biological Laboratory, Solomons, Maryland.

\* \* \* \* \*



**JELLYFISH SCARCE IN CHESAPEAKE BAY:** The spectacular scarcity of jellyfish in Chesapeake Bay during the current season has been noted by both layman and marine biologist, reports a recent release from the Maryland Department of Research and Education. Bay residents in the past have been able to predict the invasion of jellyfish into their special coves, shores, and Bay locations with precision. They arrive late in June, reach a peak the first week in August, and disappear in early September. The summer of 1953 has witnessed conditions in the Bay in which scarcely a jellyfish has been seen by casual observers even during the peak of the season.

Marine biologists at the Chesapeake Biological Laboratory have developed a number of theories why jellyfish are less abundant this year. Jellyfish are strongly affected by changes in their environment. One of the most plausible explanations for the scarcity is that of temperature and oxygen supply. Heavy rains, coupled with a very warm spring, caused marked stratification of estuarine waters in the Bay: (a) one of fresher, less dense, oxygen-rich water on the surface; and (b) the other of saltier, denser, oxygen-poor water on the bottom. Oxygen-poor bottom waters have probably entered creeks and small estuaries this late spring and summer where the vegetative polyp form and immature jellyfish occur. These stagnant waters may have affected jellyfish production by slowing down or halting their reproduction.

\* \* \* \* \*

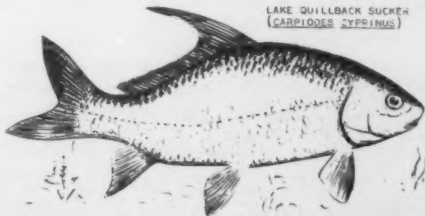
**LOBSTERS REPORTED IN COASTAL WATERS:** The occurrence of the lobster (*Homarus americanus*) in Maryland coastal waters comes as a surprise to many conservationists, but the Maryland Tidewater News published at the Chesapeake Biological Laboratory of the Maryland Department of Research and Education reports that the increased use of otter trawls in the Atlantic Ocean has produced sufficient numbers for a commercial yield.

Lobster captures are incidental. Lobster landings in Maryland in 1938 totaled 100 pounds, valued at \$100; in 1948, 1,500 pounds, valued at \$450; in 1950, 1,100 pounds, valued at \$274; and in 1951, 400 pounds, valued at \$100. In Virginia offshore waters, the landings have been progressively higher. Many more lobsters landed from Maryland's offshore waters do not enter the official commercial statistics because they are used locally by fishermen.

Attempts were made to introduce lobsters into Chesapeake Bay in 1884, when 100 lobsters were transplanted from Long Island to a point off the mouth of the James River. Conditions, however, are recognized by biologists to be unsuitable for the establishment and successful propagation of lobsters in the Bay.

\* \* \* \* \*

**RARE FRESH-WATER FISH CAUGHT IN MARINE WATERS OF PATUXENT RIVER:** Pound-net fishermen operating off Cove Point near the mouth of the Patuxent River were surprised at catching a large mysterious hump-backed fish, with thick lips, reports a recent release from the Maryland Department of Research and Education. Biologists at the Chesapeake Biological Laboratory, Solomons, were more startled when they identified the fish as the lake quillback sucker (*Carpiodes cyprinus*). This sucker is fresh water in nature, and was caught in marine waters where few fresh-water fish dare to swim.



LAKE QUILLBACK SUCKER  
(*CARPIODES CYPRINUS*)

The quillback sucker has never been found south of Bear Creek (near Baltimore) in the Chesapeake Bay basin. It is an uncommon species in Conowingo Reservoir, and

is occasionally found in the brackish parts of the Susquehanna River at the head of the Bay. It is characteristically found in fresh waters of lakes and large rivers.

The fish weighed about three pounds and was about 20 inches long. Long-term records kept at the Chesapeake Biological Laboratory indicate that this species has never been found in the Patuxent drainage.



### New York State Enacts New Fishery Legislation

The 1953 session of the New York State Legislature enacted five bills pertaining to commercial fisheries in that State, according to the June-July 1953 issue of The New York State Conservationist, a publication of the State of New York Conservation Department. The new laws are as follows:

Butterfish (Marine fisheries)—Provides that butterfish of any size may be taken and possessed, bought, and sold at any time. Effective June 1, 1953.

Fluke or Summer Flounder (Marine fisheries)—Reduces minimum size limit from 15" to 14" for taking fluke or summer flounder by commercial fishing gear, and legalizes the sale of fluke or summer flounder measuring not less than 14". Effective immediately.

Menhaden, Shad, and Herring (Richmond County)—Extends to July 1, 1955, power of Department to issue licenses to operate gill nets, pound nets, and trap nets for taking menhaden, shad, and herring from March 15 through June 15 in waters of the Marine District in Richmond County; fixes the terms of such licenses, and make rules and regulations for the operation of nets used in taking such fish. Effective July 1, 1953.

Alewives—Amends law to add alewives to the list of fish which may be taken by use of scap or dip nets in waters of the State when permitted by the Department. Effective immediately and until January 1, 1955.

Closing Waters to Fishing—Extends to July 1, 1955, power of the Department to close, by order, any waters of the State to the taking of fish whenever an environmental investigation reveals that fish life therein is in danger of undue depletion because of low water levels brought on by drought. Effective July 1, 1953.



### Pribilof Seal Skin Production Increased in 1953

A total of 66,378 fur-seal skins was obtained in 1953 in Government-administered sealing operations on Alaska's Pribilof Islands, the Secretary of the Interior announced recently. This yield was 2,508 skins greater than last year's take of 63,870 skins. The average annual yield over the past ten years has been 64,264 skins.

The Fish and Wildlife Service conducts these sealing operations annually during the Pribilof sealing season from June 22 to July 29.

Although the fur-seal industry on the Pribilofs is the responsibility of the United States Government, 20 percent of this year's take will be delivered to the

Canadian Government under the terms of the Provincial Fur-Seal Agreement of 1942 between the two countries. The remaining skins will be delivered to a private concern in St. Louis for processing and sale at public auction under a special Government contract and account. Net receipts from the sale of 48,582 skins last fiscal year were \$3,265,868.

Approximately 80 percent of the world's fur seals go to the Pribilof Islands each summer to breed. During the winter these seals range southward as far as Southern California.

At one time the number of Alaskan seals diminished to such an extent that the herd's commercial value was threatened. The depletion was due principally to pelagic sealing—the indiscriminate killing of seals at sea.

Under the protection of international agreements, the herd has since been restored to its original level of abundance. As the annual take is limited to 3-year old males—considered surplus from the standpoint of breeding—the species is assured of survival under present conditions.



### Tariff Treatment of Foreign-Caught Tuna Processed in Guam or American Samoa

"Frozen, cooked, tuna loins prepared in Guam or Samoa from fish landed there by Japanese vessels would be treated for tariff purposes as products or manufactures of those islands, regardless of their subsequent use in the United States." This is the opinion of the Bureau of Customs, Treasury Department, in a recent letter to the Director of the Fish and Wildlife Service in answer to an inquiry on the status for tariff purposes of fishery products shipped out of those islands to the United States.

The letter further explains: "Tuna landed by Japanese vessels in Guam or Samoa where they are prepared for cooking, cooked, and frozen in unsealed cans would also be considered as products or manufactures of those islands even though oil is to be added to the tuna in the United States after which the cans are sealed.

"The labeling in Guam or Samoa of tuna which has been completely processed and canned in a foreign country would not make such tuna a product or manufacture of such islands.

"The term 'actual importations into the island,' as it appears in the present regulations, refers to articles imported into any of those islands with a bona fide intent that they shall be commingled with the mass of things in the island. It does not refer to goods merely in transit through the islands nor to goods merely stored in the islands with the intent to later send them to some place other than in the islands."

NOTE: SEE COMMERCIAL FISHERIES REVIEW, JULY 1953, P. 31; APRIL 1953, P. 26.



## Wholesale Prices, July 1953

Since the July catch of edible fish and shellfish was somewhat lighter than the previous month, prices for edible fishery products stiffened slightly in July. The edible fish and shellfish (fresh, frozen, and canned) wholesale index for July 1953 was 102.5 percent of the 1947-49 average (see table)—higher than June 1953 by 1.6 percent and below July 1952 by 0.4 percent.

Products under the drawn, dressed, or whole finfish subgroup were priced higher in July. Although the price of fresh offshore haddock at ex-vessel moved only slightly upward from June to July, substantially higher prices were reported at wholesale for halibut, salmon, and most fresh-water varieties. But compared with July 1952, prices this July were considerably lower for fresh offshore haddock (23 percent), Western halibut (5 percent), and most fresh-water fish. The drawn, dressed, or whole finfish index for July this year was 3.7 percent above that for the previous month, but 9.5 percent lower than in July 1952.

Table 1 - Wholesale Average Prices and Revised Indexes for Edible Fish and Shellfish, July 1953 and Comparisons									
Group, Subgroup, and Item Specification	Point of Pricing	Unit	Avg. Prices <sup>1</sup> (\$)		Indexes (1947-49 = 100)				
			July 1953	June 1953	July 1953	June 1953	May 1953	July 1952	
<b>ALL FISH AND SHELLFISH (Fresh, Frozen, and Canned)</b>					102.5	100.9	106.5	102.9	
<b>Fresh and Frozen Fishery Products:</b>					107.2	103.2	112.2	107.1	
<b>Drawn, Dressed, or Whole Finfish:</b>					101.0	97.4	95.7	111.6	
Haddock, large, offshore, drawn, fresh	Boston	lb.	.09	.09	87.3	87.1	90.1	113.4	
Halibut, Western, 20/80 lbs., dressed, fresh or frozen	N.Y.C.	"	.33	.31	102.9	95.9	90.5	108.3	
Salmon, king, lge. & med., dressed, fresh or frozen	"	"	.49	.48	110.7	108.4	104.5	110.2	
Whitefish, mostly Lake Superior, drawn (dressed), fresh	Chicago	"	.46	.36	112.8	88.0	122.7	86.7	
Whitefish, mostly Lake Erie pound or gill net, round, fresh	N.Y.C.	"	.45	.52	91.0	104.1	121.3	94.0	
Lake trout, domestic, mostly No. 1, drawn (dressed), fresh	Chicago	"	.53	.52	107.6	106.5	98.4	117.9	
Yellow pike, mostly Michigan (Lakes Michigan & Huron), round, fresh	N.Y.C.	"	.61	.45	143.6	105.5	72.7	166.5	
<b>Processed, Fresh (Fish and Shellfish):</b>					115.9	111.9	134.2	101.1	
Fillets, haddock, sml., skins on, 20-lb. tins	Boston	lb.	.28	.27	93.5	91.9	91.9	90.2	
Shrimp, lge. (26-30 count), headless, fresh or frozen	N.Y.C.	"	.79	.74	124.9	117.0	158.1	94.9	
Oysters, shucked, standards	Norfolk area	gal.	4.50	4.50	111.3	111.3	117.5	111.3	
<b>Processed, Frozen (Fish and Shellfish):</b>					112.3	106.5	124.3	102.6	
<b>Fillets:</b>									
Flounder (yellowtail), skinless, 10-lb. pkg.	Boston	lb.	.31	.31	108.7	108.7	108.7	124.4	
Haddock, sml., skins on, 10-lb. cello-pack	"	"	.22	.21	82.8	79.0	70.7	87.4	
Ocean perch, skins on, 10-lb. cello- pack	Gloucester	"	.21	.22	101.1	103.5	108.3	108.3	
Shrimp, lge. (26-30 count), 3-lb. pkg.	Chicago	"	.37	.78	133.4	119.5	163.5	98.7	
<b>Canned Fishery Products:</b>					95.5	97.5	98.0	96.9	
Salmon, pink, No. 1 tall (16 oz.), 48 cans per case	Seattle	case	18.95	19.70	100.4	104.4	104.4	104.4	
Tuna, light meat, solid pack, No. 1/2 tuna (7 oz.), 48 cans per case	Los Angeles	"	14.80	14.80	92.4	92.4	92.4	90.5	
Sardines (pilchards), Calif., tomato pack, No. 1 oval (15 oz.), 48 cans per case	"	"	9.25	9.25	108.0	108.0	108.0	109.4	
Sardines, Maine, keyless oil, No. 1/2 drawn (3 1/2 oz.), 100 cans per case	N.Y.C.	"	6.70	6.70	71.3	71.3	76.6	68.6	

<sup>1</sup> REPRESENT AVERAGE PRICES FOR ONE DAY (MONDAY OR TUESDAY) DURING THE WEEK IN WHICH THE 15TH OF THE MONTH OCCURS.

Fresh shrimp prices, which had dropped substantially in June, rose again in July because the Gulf catch did not come up to expectations. Fresh haddock fillet prices also increased. Quoted considerably higher this July than during the same month last year were fresh haddock fillets and fresh shrimp. The fresh processed fish and shellfish index in July was 3.6 percent above the previous month and 14.6 percent higher than in July 1952.

Frozen shrimp prices (like those for fresh shrimp) also rose substantially in July. Prices for frozen shrimp in July were 11.5 percent higher than in June and 35.2 percent above July 1952. From June to July there was no change in frozen flounder fillet prices, but frozen haddock fillet prices increased 4.8 percent while ocean perch fillets dropped 2.3 percent. Compared with July 1952, frozen fillet prices this July were lower. Principally because of higher shrimp and haddock fillet prices, the processed frozen fish and shellfish index rose 5.4 percent from June to July and was 9.5 percent higher than a year earlier.



MARKET, CORNER OF FULTON AND UNION STS., CHICAGO, ILL.

most a year. The lower salmon prices accounted for the drop of 2.1 percent in the canned fishery products index for July 1953; this index was 1.3 percent below July 1952.



## Wisconsin's Great Lakes Commercial Fisheries Catch, 1951-52

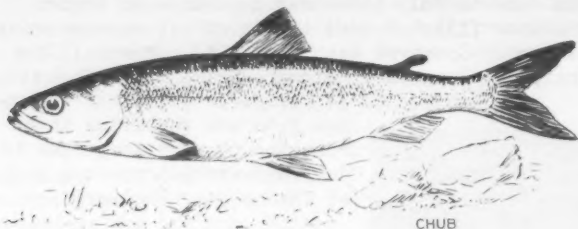
The total catch of Wisconsin's Great Lakes commercial fisheries during 1952 amounted to 21,613,710 pounds (see table), an increase of 9.5 percent over 1951.

Species	Wisconsin's Great Lakes Commercial Fisheries Catch, 1951-52					
	Lake Michigan		Lake Superior		Total Catch	
	1952 Lbs.	1951 Lbs.	1952 Lbs.	1951 Lbs.	1952 Lbs.	1951 Lbs.
Lake trout .....	3,058	6,700	521,000	504,123	524,058	510,823
Whitefish .....	289,857	242,284	140,176	182,828	430,033	425,109
Menominee .....	75,504	44,312	306	4,387	75,810	48,699
Chubs .....	6,755,125	6,578,057	17,761	6,461	6,772,886	6,584,518
Lake herring .....	3,959,117	3,392,840	5,889,584	5,346,740	9,848,701	8,739,580
Yellow perch .....	1,247,648	854,726	...	...	1,247,648	854,726
Mullet (Suckers) ..	254,576	246,062	45,698	43,763	300,274	289,825
Carps .....	1,068,578	1,111,527	19	22	1,068,597	1,111,549
Catfish .....	7,326	9,187	...	...	7,326	9,187
Bullhead .....	48,210	41,023	...	...	48,210	41,023
Smelt .....	1,071,206	954,978	44,834	966	1,116,040	955,944
Lawyer .....	8,621	15,207	7,011	6,652	15,632	21,859
Crawfish .....	3,298	593	...	...	3,298	593
Wall-eyed pike ....	10,487	22,500	10,499	19,656	20,986	42,156
Pickereel .....	46,276	9,580	61	874	46,337	10,454
Sheepshead .....	8,557	19,534	24	...	8,581	19,534
Bloaters .....	74,892	61,822	...	...	74,892	61,822
Sebago salmon .....	...	...	4,401	3,860	4,401	3,860
Billfish .....	...	6	...	...	...	6
Total .....	14,932,336	13,610,935	6,681,374	6,120,332	21,613,710	19,731,267

Lake herring (46 percent) and chubs (31 percent) comprised the bulk of the total catch in 1952, and represented about the same percentage as in 1951. Landings of lake trout increased slightly in 1952 but comprised only about 2 percent of the total in 1952, a very slight increase over 1951.



In both 1951 and 1952 Lake Michigan yielded 59 percent of the total catch and Lake Superior the remaining 31 percent. In Lake Michigan the leading species in



CHUB

both years was chubs, followed by herring and carp; there was only a very small quantity of lake trout landed in Lake Michigan. Lake herring comprised the bulk of the catch in Lake Superior in both years (about 90 percent). Practically all the lake trout landed in Wisconsin in both years was taken from Lake Superior waters.



#### BYPRODUCTS PRODUCTION, 1952--U. S. AND ALASKA

##### DO YOU KNOW:

That the 1952 production of fishery byproducts in the United States and Alaska was valued at almost \$68 million--2 percent less than in the previous year.

Fish and marine animal scrap production in 1952 amounted to over 221 thousand tons, valued at over \$27 million to the manufacturers. This was an increase of 11,600 tons in quantity and \$1.8 million in value as compared with 1951.

Marine-animal oils produced in the United States and Alaska during the year amounted to over 16 million gallons valued at \$9.4 million to the manufacturers. This was a decrease of 11 percent in quantity and 44 percent in value as compared with 1951.

Some of the other important byproducts produced during the year were marine pearl-shell, oyster shell, and fresh-water shell products, valued at almost \$15 million; and fish solubles and homogenized condensed fish, valued at nearly \$6 million. Byproducts were produced in 255 plants in 25 states and Alaska during 1952.

--Canned Fish & Byproducts - 1952,  
C. F. S. No. 882

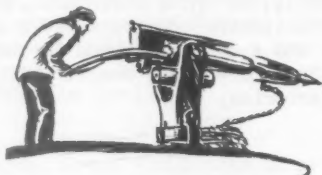


## International

### INTERNATIONAL WHALING COMMISSION

**FIFTH ANNUAL MEETING:** The fifth Annual Meeting of the International Whaling Commission convened in London June 22-26, according to a press release from the Commission. The 17 countries represented by delegates were: Australia, Brazil, Canada, Denmark, France, Iceland, Japan, Mexico, the Netherlands, New Zealand, Norway, Panama, South Africa, Sweden, U.S.S.R., United Kingdom, and United States. Four other countries—Argentina, Italy, Peru, and Portugal—and three international bodies sent observers. The next meeting on July 19, 1954, will be held in Tokyo, Japan.

Most of the Commission's deliberations centered around the necessity for some definite measures designed to promote the conservation of the whale stocks, which is the main concern of the Commission; unanimity was reached upon a number of these measures. However, as these have to be communicated to each



government which then has the right to object within a period of 90 days, no finality can be reached until the expiration of that period. These measures involve amendments to the Schedule attached to the International Whaling Convention of 1946.

Apart from the substantive amendments, a large number of other amendments to the Schedule, of a purely drafting character, were accepted by the Commission and will also be submitted to Contracting Governments.

The Commission also approved a re-arrangement of the entire Schedule so as to secure uniformity, and this will in due course be submitted to the governments for their acceptance.

### ANTARCTIC WHALE-OIL PRODUCTION, 1945/46 TO 1952/53

Whales taken during the recent 1952/53 Antarctic whaling season yielded over one-fourth more oil than those caught 8 years ago (see table) reports the July 13, Foreign Crops and Markets, of the U. S. Department of Agriculture. The yield of oil per blue-whale unit rose from 16.42 long tons in 1945/46 to 21.09 tons in the last season. Whales killed in recent seasons have been fatter, partly because of a later opening date for the whaling season. More efficient methods of oil extraction also are responsible for the greater yields.

Other observations made at the U. S. Embassy, London, on the basis of a compilation of whale-oil production data by the British Ministry of Food include: (1) the length of the pelagic season has decreased from 122 days in 1946/47 to 64 days in 1951/52 and 74 days in 1952/53, (2) the increased yield of oil has resulted in an increase in total whale-oil production even though the number of blue-whale units

Antarctic Whale-Oil Production, 1945/46 to 1952/53									
Season	1945/46	1946/47	1947/48	1948/49	1949/50	1950/51	1951/52	1952/53	Cumulative
Season commenced	Jan. 2, 1945	Jan. 2, 1946	Dec. 22, 1946	Dec. 22, 1947	Dec. 15, 1948	Dec. 8, 1949	Dec. 8, 1950	Dec. 8, 1951	Not recorded
Duration of pelagic season	74 days	66 days	78 days	84 days	102 days	115 days	122 days	Not recorded	Total
(Long Tons)									
<b>Land Station Catch:</b>									
United Kingdom	6,723	8,715	9,096	7,793	9,969	10,210	8,672	2,335	63,513
Norway	7,251	7,852	8,251	9,181	9,183	9,075	7,075	3,200	61,078
Argentina	6,732	8,821	8,234	8,677	8,628	9,025	10,000	8,817	68,921
	20,723	25,388	25,581	25,651	27,780	28,310	25,747	14,352	193,512
<b>Production (Factoryship)</b>									
United Kingdom	65,600	63,443	61,203	71,093	81,086	79,575	76,013	38,115	536,128
Union of South Africa	23,717	27,365	23,000	22,537	22,233	25,864	30,333	-	175,049
Norway	123,019	161,167	155,117	164,735	155,893	156,638	150,085	83,260	1,150,114
Netherlands	16,965	15,500	15,260	12,999	17,587	13,000	12,885	-	104,156
Japan	33,431	34,508	24,569	26,511	19,893	17,476	12,227	-	168,615
Russia	24,783	23,382	17,792	16,804	10,054	9,302	5,783	-	107,900
Panama	25,825	15,991	20,333	-	-	-	-	-	62,140
	313,340	344,256	317,474	314,659	306,746	301,855	287,326	121,375	2,304,111
Average production per B.M.U.	21.09	21.37	19.39	19.65	19.26	18.52	18.87	16.42	-
Total blue-whale units for pelagic catch	14,855	15,971	16,371	16,011	15,926	16,302	15,230	7,390	-
Grand total	334,063	366,744	343,065	360,290	334,526	330,165	313,073	135,727	2,497,653

1/INCLUDES SEAL OIL CATCH FOR EACH SEASON EXCEPT 1952/53.

has been fixed at 16,000 by international agreement. Thus, although the total number of units caught in 1952/53 was 14,855, the production of whale oil was 334,063 tons, or greater than the 330,165 tons in 1947/48 when 16,302 units were taken, and (3) the output of whale oil by expeditions of the participating countries shows a sharp upward trend for the Russian and Japanese ships and a downward trend for Norwegian vessels. United Kingdom production also has tended downward, despite the increased daily processing capacity of her floating factories.



## Aden

**STATUS OF THE FISHERIES:** Landings: It is estimated that 3,000 to 3,500 metric tons of fish are landed yearly in Aden Colony, reports a June 22 U. S. consular dispatch from Aden. Of this total about 750 tons are consumed as fresh fish within the Colony and the balance is dried and salted for export.

There is no breakdown of landings by species available, but the most important consumed fresh are dairak (a species of jack), Mediterranean tuna, snappers, mackerel, sardines, and assorted rockfish. For drying and salting, sharks and anchovies are used, as well as dairak, tuna, snappers, and sardines.

**Fishing Methods:** Along the Aden coast almost all fishing is done within a mile or two of the shore. It is estimated that in the Colony itself some 1,100 Arabs are occupied as fishermen and that they use approximately 200 small double-ended native canoes, usually manned by 2 men, and about 40 larger (35-foot) native surfboats. Cast nets are used for sardines; and gill nets, tangle nets, and heddle nets for other fish. At times, and for certain species, hand lines are also used.

**Marketing:** At present, marketing methods are determined by the lack of cold-storage facilities and by the activities of 6 or 7 important dried fish exporters. A very large number of all the Colony fishermen rely upon these dried fish dealers for loans and advances for boats, gear, and even for personal emergencies and, as a result, are more or less continually in debt to the dealers. When these fishermen land their catch, the dealers compel them to sell it for drying or salting:

where a 10-pound dairak, for example, may bring only three shillings (42 U.S. cents) as against 10 or 15 shillings (US\$1.40-2.10) if sold as fresh fish. Most of the fishermen are illiterate and, in any case, written accounts do not always exist so that, once in debt, it is difficult for a fisherman to get himself out.

There is no central cold storage in Aden and refrigerator facilities among the fresh fish retailers, who usually buy directly from the fishermen, are extremely limited. Very often the retailer must refuse to buy for lack of refrigerator space.

The result of these conditions is that the supply of fresh fish in Aden is usually less than the demand. It is estimated that consumption in the Colony alone would increase from the present 15 metric tons a week to about 25 tons, if the necessary facilities existed to insure a greater supply. It is also estimated that ships calling at Aden would purchase in the neighborhood of 20 tons of fresh fish weekly, if it were available.

Canning: There is little prospect of any canning enterprise in Aden Colony. The tuna and anchovies caught off the Colony are not suitable for canning and, although the dairak and sardines could be made into a pack of inferior quality acceptable in certain markets, the Colony fish supply is inadequate and unreliable, except in the summer months.

Several individuals, however, are said to be interested in the possibility of a canning and/or fish-oil plant in the Protectorate, probably at Mukalla. A plant was established there a year ago and failed. However, the interested firms, including three Italian firms already set up in Somalia, still believe the project is a feasible one.

Exports: Exports of dried and salted fish in 1952 approximated 7,500 metric tons; about 5,000 tons of which were re-exports originally imported into Aden for grading and sorting, chiefly from the Aden Protectorates and Italian Somaliland. Almost all exports are to Ceylon, but in recent months Germany has appeared as a customer.

Government Assistance: In 1948 and 1949 the British Government financed from Colonial Welfare and Development Funds a survey of the Southern Arabian coast. The survey was conducted by two fishery officers in two vessels, accompanied by a fish-oil chemist, a taxonomist, and a cannery expert. The results of the survey have not yet been published but, following the survey, the Colony established a Department of Fisheries to develop fishing in the Colony and Protectorates. At present this Department is staffed by only one British officer who has at his disposal one fishing vessel, but only limited staff, funds, and facilities.

The Department of Fisheries aim in the Aden Colony is to increase landings, to establish cold-storage facilities, and to improve marketing methods. Its own fishing vessel is engaged in research for better fishing areas. There are no banks near Aden and all fishing is shoal fishing, but the Department believes that more suitable areas may be discovered farther offshore and has already located several promising spots 10 or 15 miles at sea. To avail themselves of these areas, of course, it will be necessary for the fishermen to have motors and bigger boats, and to show what can be done the Colony has equipped two surfboats of its own with motors. If any promising areas are discovered at some distance from Aden, the Colony hopes to be able to persuade the fishermen to form a cooperative and perhaps even purchase a modern motorized fishing vessel.

To lessen the dependence of the fishermen on the dried fish merchants, the Colony expects to spend £2,000 (US\$5,600) this year buying gear and tackle for resale to the fishermen at cost, and it is operating a hire-purchase scheme by which fishermen are able to finance purchases of their boats through the Colony. In addition, a marketing cooperative for the export of dried and salted fish is now being formed.

The Fisheries Director also has plans for the establishment of a fish market and cold-storage plant and, in connection with this, for the creation of one or more fishermen's cooperatives. Unfortunately, the funds for this plant have not yet been voted by the Colony and there is no certainty as to when the project will get under way.

## Canada

SEARCH FOR ATLANTIC HERRING: A large-scale search for commercial quantities of herring in offshore Atlantic waters has been initiated by the Canadian Department of Fisheries through its Fisheries Research Board, according to the May 1953 issue of Canadian Trade News. The search, which covers a wide range of waters off the coast of Nova Scotia as well as the Gulf of St. Lawrence, is being carried out by a small fleet of specially-equipped vessels.

The M/V Harengus, a Fisheries Department vessel, has been assigned to the Research Board for the work, and a Lunenburg dragger, the Marion Crouse, has been chartered for the duration of the exploration program. Both vessels will use all available modern devices, including echo-sounders, in the attempt to locate schools of herring. One of the Department's patrol vessels, the Louise Ruth, will conduct a search in waters off Newfoundland, and a commercial vessel will be chartered to explore the waters off Nova Scotia.

Technicians from the Research Board's Atlantic Biological Station at St. Andrews, N. B., are taking part in the work to record scientific data, and experienced technicians from France and the Netherlands are on the vessels working in the Gulf to direct the use of special fishing gear which has proved successful in these countries.

Various methods of fishing are being tried—purse-seining and bottom and mid-water trawling. The experiments are expected to determine the most suitable and effective gear and techniques.

Until now the Canadian herring fishery in Atlantic waters has been largely an inshore operation. In the spring in the Gulf, herring are concentrated in the inshore areas, where they spawn, providing good supplies during late April and May. They move farther out to sea in the summer and it is felt that by following them to deep water the herring season can be greatly extended, possibly by as much as five months.

Previous investigations have indicated that there are large stocks of herring in the Gulf of St. Lawrence and that in the daytime they go to the bottom, moving nearer to the surface at night. These investigations, carried out by the Atlantic Biological Station, have been of a research nature only. The present exploratory program is on a commercial scale.

Even with the comparatively short herring season which has been available to Canada's Atlantic fishermen it has provided a substantial revenue. In 1951 the total catch of herring, 271,100,000 pounds, had a marketed value of \$13,400,000.

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BRITISH COLUMBIA SURVEY REVEALS LITTLE POSSIBILITY OF EXPANDING SHRIMP FISH-ERY: In an attempt to extend profitable fishing grounds, the Fisheries Research Board of Canada's vessel Investigator No. 1 made an exploratory shrimp fishing trip in the Strait of Georgia off British Columbia during April. Fishing generally was restricted to depths available to shrimp vessels now operating, according to the May 1953 Trade News of the Canadian Department of Fisheries.

Of the 29 hauls recorded, 24 contained shrimp. However, only relatively few hauls yielded them in quantities to suggest commercial possibilities. The most promising places appeared to be: (1) off Ladysmith Harbour to Chemainus; (2) inside Bjerre Shoal, between Welcome Pass and Pender Harbour; (3) the southwest corner of Gambier Island; (4) off the mouth of the Fraser River

Most of the shrimp fishing in British Columbia waters is now carried out close to fishing ports on well established grounds and the potentialities of the shrimp and prawn resources of the Province have been relatively unexplored.

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STURGEON FISHING IN SASKATCHEWAN: Commercial fishermen in the Cumberland House and Island Falls areas of northeastern Saskatchewan may harvest more than 10,000 pounds of sturgeon this year, according to the Provincial Director of Fisheries, a June 30 news release states.

The commercial season for sturgeon, which extends to September 15, was recently opened for the fourth consecutive year on the Saskatchewan river and tributary waters in the Cumberland House region, where the limit is 8,000 pounds.

In addition, for the first time since 1946, sturgeon fishing is also permitted on Okipwatsikew and Wasawakask lakes near Island Falls, with a limit of 2,000 pounds for each of the two lakes.

The Saskatchewan Fish Marketing Service is handling the catch, with an initial price of 50 cents a pound being paid fishermen at receiving points, and a final payment when all sales are completed. Sturgeon brings a higher price than any other inland waters fish on the market today.



## Chile

FISHING INDUSTRY TO BE MODERNIZED: Annual credits of US\$4 million to fisheries and fish-processing companies are to be granted for a period of five years by the Industrial Credit Bank, Santiago, Chile, to modernize that country's fishing industry. New cold-storage plants are to be constructed, and improvements and expansion to be carried out on fishing ports and equipment.



## Ecuador

NEW FISHERIES LAW PLANNED: The Ecuadorean Ministry of Economy plans to submit to Congress after August 10 a new law on fisheries. A meeting was held in Quito on July 20 between representatives of fishing companies operating in Ecuador, leaders of local fishermen's associations, and government officials in order to obtain the

various points of view on Ecuador's fisheries. It is believed that the points of view brought out at the meeting will be taken into account in the draft of a new law on fisheries.

NEW COMPANY PLANS FISH EXPORTS TO U. S.: A new fishing company is being promoted in Ecuador by a United States citizen. This company plans to buy fish from local fishermen in Manabi Province for export to the United States. But the company is also seeking to obtain a contract from the Ministry of Economy to permit it to operate its own fishing boats in Ecuadoran waters.

TWO U. S. BOATS ENCOUNTER DIFFICULTIES RENEWING FISHING LICENSES: It is reported that two United States bottom-fishing boats operating in Galapagos waters are encountering difficulties in obtaining a renewal of their fishing licenses.



### German Federal Republic

FISHERIES PRODUCTION, 1952: The total production of the German sea fisheries in 1952 was 638 thousand metric tons; 2.5 percent less than the 654 thousand tons produced in 1951, reports the July 11 Foreign Trade, published by the Canadian Department of Trade and Commerce. The annual average for the period 1935-38 was 669 thousand tons. The year 1952 was the first since the end of World War II that production failed to increase.

Deep-water trawlers accounted for 74 percent of the total landings in 1952; lugger herring fisheries, 9 percent; and inshore cutter fisheries, 17 percent. Trawler landings decreased from 1951 because of unfavorable fishing conditions during the fall herring season and the unsettled market conditions. The 1952 herring production of 280,088 metric tons was about 30,000 tons below the previous year. The red perch (ocean perch) catch was considerably larger than in 1951; cod and saithe production remained unchanged; and haddock landings decreased.



### Japan

U. S. AND JAPANESE TUNA INDUSTRY MISSIONS DISCUSS TUNA PROBLEMS: A three-man mission from the United States canned tuna industry arrived in Japan on July 17, states a U. S. Embassy dispatch from Tokyo. It is a fact-finding mission to determine policy, programs, and trends of production and processing with respect to Japan's exports of frozen and canned tuna. The mission will hold discussions on these topics with representatives of the Japanese tuna industry, and will in turn acquaint the local industry with the current status and outlook of the United States industry. It is hoped that these discussions will result in the development of a better understanding of the problems, a basis of improving trade, and more cordial relations between the United States and Japanese tuna industries. It is pointed out that the mission has no official status.

A news release in the July 27, 1953, issue of the Nippon Suisan Shimbum, a Japanese trade journal, indicated that the following was a summary of the statement issued by the three-man mission from the United States:

1. Objectives of the representation: We are the formal representatives of the producers of 95 percent of America's canned tuna. The remaining 5 percent are factories in the east and at Monterey. Consequently what we say reflects the thinking of the United States tuna industry as a whole.

2. Objectives of the trip to Japan: To consult on various problems concerning the methods of exporting Japanese frozen and canned tuna. Accordingly we wish to discuss these problems with all persons and official and unofficial bodies in the freezing, canning, exporting, and fishing businesses.

3. Understanding the position of the Japanese tuna industry: Japan must export frozen and canned tuna to earn dollars. At this time we are not opposed to Japan's tuna industry's having a suitable share in the United States market.

4. Basis of that share: Japan's share should be based upon conformity with past historical records. Of course, the United States market is expanding year by year, and Japan's share in it will probably also increase.

5. Development and determination of the American tuna industry: The United States tuna industry has its troubles just as the Japanese industry does. The reasons why canned tuna production has attained its present level of development are (1) several millions of dollars have been spent on advertising to expand the market; (2) continual studies of marketing areas and seasons are being carried on; (3) the basis of the enterprise has been formed by making the American housewife thoroughly conscious of the protein value and economy of canned tuna. We feel a proper pride in this and we are determined to protect our industry.

6. Frozen tuna problems: There are those who oppose the importation of frozen tuna, but from the points of view of the world distribution of tuna fishing grounds, the conservation of the fish, and international economics, a free and unlimited market should be given to frozen tuna (raw material).

7. The brine-packed tuna problem: We are convinced that continued unlimited exportation of tuna in brine will bring the total ruin of the United States market. Consequently if this is continued in the future the United States tuna industry will rise en masse to agitate for an increased tariff. Brine-packed tuna has a bad effect on the prices of other canned tuna, with the eventual result of lowering the prices of Japan's canned and frozen tuna. In other words, it reduces the income not only of the United States industry but of the Japanese industry as well.

8. Methods of solving canned tuna problems: We wish to seek a solution by the regular and normal methods. Naturally we have no wish to disrupt the Japanese industry. While thoroughly studying the Japanese canned tuna quota, we respect the time-honored position of the canning industry. In this spirit the United States tuna industry is proposing and urging the following plan.

9. Establishment of a joint sales organization: Establishment of a joint sales organization is proposed for the mutual profit of Japanese and Americans. The essentials of the plan are as follows:

- (1) It would carry on sales of canned tuna.
- (2) It would be operated by experienced men conversant with conditions in both the Japanese and United States tuna industries.
- (3) Japanese canned tuna will be guaranteed a share in the American market based on historical records (past sales).
- (4) The organization would probably also undertake the mission of developing world markets.

In case this plan appears worthy of adoption, discussion should be started concerning the following points: (1) location of the company; (2) personnel; (3) financing.

10. Postscript: We have no present connection with fishermen or importers.

In addition to the three-man mission from the United States canned tuna industry, it has been reported that there is a mission in Japan representing the United States tuna fishermen.

Another Japanese press release offers this countermove to the plan offered by the representatives of the United States canners:

The international cast of the U. S. tuna export problem has deepened with the arrival in Japan of representatives of American canners and fishermen and with the publication of the canners' statement. As a conclusion drawn by assembling the opinions of fair-minded third parties, it is indicated that the most important point at this time is the strengthening of the domestic organization of the Japanese tuna industry. After all, for the Japanese tuna industry as a whole it is necessary to export frozen tuna, but the export of canned tuna is also important. Consequently in order to counter the American canners' plan the only method is to form a strong economic organization composed of freezers, canners, fishermen, and exporters to conserve (buy up) all of the fish landed and plan measures to support fish prices and adjust ex-

ports. This would involve--

- (1) Securing (buying) all tuna landings, maintaining fish prices, and regulating exports.
- (2) For this purpose fishermen, refrigerated storage operators (freezers), canners, and exporters would organize to form a raw material purchasing company.
- (3) Buying of raw fish from the fishermen would be done on a floor-price system, and frozen fish would be purchased on a ceiling-price system.
- (4) The holding of frozen fish would be turned over to the freezers at a fixed rate of pay for a fixed period.

- (5) Sales would be first to frozen tuna exporters, second to canners as raw material, and third, excess goods would be sold domestically.
- (6) Inspection for quality of fresh and frozen fish would be carried on.

As for the capital structure, the organization would function perfectly well with a total of about 2,000,000,000 yen (US\$5,555,000), of which the members would put up half, the other 1,000,000,000 yen (US\$2,777,000) for operating capital being obtained on a long-term loan.

However, for this plan a strong and intimate coalition between the canners and freezers is a necessary prior condition, and it is particularly to be hoped that the present situation of stubborn opposition will dissolve, but the attitudes of both sides have proved stiffer than could have been foreseen and it is believed that there is no way out except through the mediation of government leaders. In any case, the healthy development of the Japanese tuna industry lies in the establishment of autonomy through the solidarity of the persons engaged in the industry in Japan, and it is strongly hoped that they will realize this.

On July 23 tuna canners held an important conference with the representative of the United tuna fishermen, the talk centering around the proposals

communicated as the unofficial views of the canners:

- (1) The visit of the American canners' representatives to Japan is not thought of as an official mission representing the parties concerned in the U. S., but simply as a frozen tuna buying group.
- (2) Japanese canning circles have already been studying the establishment of a joint Japanese-American cooperative sales company.
- (3) We wish, however, to study the proposals with the proviso that we will maintain our own standpoint and that Japanese products will use Japanese labels.

These are, however, only the views that the canners representatives would be duty-bound to express, and there are some who believe that they do not actually hold these opinions.

A four-man group engaged in, or closely associated with, the Japanese canned tuna industry left Japan for the United States on July 21. The individuals of the mission are making the trip in connection with the business interests of their individual firms or organizations. It is expected, however, that either as a group or as individuals they will take the opportunity to meet with representatives of the United States tuna industry to discuss problems of mutual interest. This group is not considered an official mission from the Japanese tuna industry.

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EXPORTERS PLAN TO PROMOTE PRODUCTION AND EXPORT OF CANNED TUNA: Japanese exporters of canned tuna are reportedly sponsoring a bill "for the promotion of canned tuna and skipjack exports" based on the contention that greater profits accrue from the export of canned as compared to frozen tuna. The bill has been introduced in the Diet and has created a furore in Japanese tuna circles, according to a June 22 U. S. Embassy dispatch from Tokyo. Exporters of frozen tuna are, of course, aroused and have held meetings to organize strong opposition to the bill. Exporters of frozen tuna are attempting to seek the support of tuna and skipjack fishermen organizations in opposing the bill.

An important official of the Japanese Canners Association voiced personal opposition to the bill on the ground that it condones unfair trade practices within the tuna industry. This is significant because the bill obviously intends to favor exports of canned over frozen tuna, and hence should benefit the canners who are not direct exporters. Some individuals in tuna groups believe the bill is in violation of Japan's fair trade regulations.

The bill indicated that considerable interest is being evinced in the Japanese tuna industry at home as well as abroad over exports of tuna products. Canners of tuna and exporters of frozen tuna are in brisk competition for fish, with canners forcing higher bids on ex-vessel purchases. In view of the continued strong demand from United States buyers, especially for frozen tuna and to a less extent the canned product, Japanese firms are presently enjoying "a seller's market." Prospects were that this would continue to the end of the current albacore season in July and extend throughout the summer yellowfin season.

An article in the June 20 issue of Nippon Times points out:

...The backers of this bill contend that the best interests of Japan will be served by exporting tuna as a finished product—canned—rather than in its unprocessed state to feed American canneries. It is argued that Japan's cannery facilities will be expanded and more employment will be given workers, if the export of frozen tuna is curtailed. And in what they believe to be the "clincher" to their arguments, they naively suggest that the continued export of unprocessed tuna would mean Japan's tacit recognition and supine acceptance of a colonial status.

Apparently, it has not occurred to the proponents of this measure that neither the United States nor Australia ever considered it below their dignity as a sovereign nation to export raw cotton and wool to Japan. Surely the mere fact that a nation is an exporter of raw or semi-processed materials does not make it a colony which is being ruthlessly exploited.

Now, one of the rules of marketing and of trade is that the seller keeps himself in close touch with and adjusts his products to meet the needs and desires of the buyer. Japan has been exporting tuna products to the United States, our sole customer, over a long period. And that export has been in the form of both canned and frozen—in varying proportions because our customer wants it that way.

It is true, of course, that we stand to make a greater gain by selling processed rather than raw tuna. But we cannot have our cake and eat it too. It is not difficult to imagine what would happen if we suddenly decided to curb our export of frozen tuna and to concentrate on the sale of canned tuna. For one thing the American tuna packing industry will come out with a concerted drive to raise the

present high tariff on canned tuna and to restrict its import. For another it will give great impetus to our chief competitors, Peru and the Pacific Coast fishermen, to expand their operations and in this they will have the aid of the packers so that the present heavy demands for unprocessed tuna can be met. Japan will lose her market not only for canned but frozen tuna as well. In short there will not be any cake at all for her.

We must realize that the phenomenal growth of the consumer demand for tuna products in the United States—estimated at more than 10 million cases this year—has been the result of a widespread and high-pressure publicity campaign carried out by the American tuna industry. The American taste for tuna is actually being cultivated at the cost of millions of dollars in publicity by the tuna packers there. They are doubtlessly willing to share its results—but not at the expense of their being shut out by a flood of Japanese canned tuna. The desire of the Japanese canners to expand is, of course, understandable and there are many potential markets other than the U. S. which could be cultivated.

We hope that the sponsors of this move will realize their short-sightedness. Certainly the interests of the Japanese tuna fishermen deem that this proposed bill be quashed, for if this measure goes through they will be at the complete mercy of the canneries.

Japan is trying to expand her export at a time when there are forces at play abroad to raise tariff barriers. At such a time, it would be suicidal for any part of our industry to take action which would only encourage a move toward the erection of tariff walls. The whole problem of trade expansion is difficult enough without our making it any tougher.

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BILL FOR PROMOTION OF CANNED TUNA EXPORTS AMENDED: The Japanese tuna industry became increasingly agitated by the proposed bill which would favor the exportation of canned tuna rather than frozen tuna, a July 10 U. S. Embassy dispatch from Tokyo points out. The original bill was concerned with "the promotion of canned tuna and and skipjack exports." This aroused such a protest from the frozen-tuna interests, that an amendment has been submitted which renames the bill "A Bill for the Promotion of Exports of Processed Aquatic Products;" in addition, certain specific terms were generalized. The principal articles of the amendment are as follows:

Art. 1. The purpose of this law is to promote exports of superior, processed aquatic products by regulating those processed in a lesser degree.

Art. 2. Unless permission is obtained from the Minister of International Trade and Industry (MITI), the items listed separately shall not be exported in frozen form.

Art. 3. If it is desired to export canned aquatic products, only those canned at the packing plants designated by the Minister in charge shall be released for export.



Art. 4. Before granting the permission referred to in Article 2, the Minister must have the opinion of the Aquatic Products Export Council (the council shall be established in MITI and its organization and functions specified by a Cabinet ordinance)....

Articles 1 and 2 are causing the most comment. In Article 1 the "superior processed aquatic products" is interpreted by the industry as canned tuna or tuna-like fishes, and the "regulating exports of those processed in a lesser degree," as frozen tuna.

Article 2 makes possible the mandatory control by the Government of exports of frozen tuna.

Discussions on this bill have been quickly drawn into the heated controversy which recently developed over the authorization by an agency of the Government of a reported 21,000 short tons of frozen tuna for export (mostly to the United States) from approximately March 20 to June 26. This equals the official quota for last fiscal year (April 1, 1952, to March 31, 1953), which was originally 12,000 tons, but was raised twice to the limit of 21,000. Critics claim the Government should have started from the same base line in considering exports of frozen tuna for the current year.

Negotiations are already under way between Japanese exporters and United States canners for the exportation of frozen yellowfin as soon as landings are made at Japanese ports, indicating as strong a demand for this product as was the case last year.

At the moment, therefore, interested Government agencies are holding frequent meetings to "consider the problem of tuna exports;" exporters and canners of tuna are urging support of the proposed bill on Exports of Processed Aquatic Products and asking the Government to apply a quota on frozen tuna. Exporters of frozen tuna (conscious of their numerical weakness) are protesting against the bill and opposing any proposed quota on this product. Fishermen, or at least operators of tuna boats, have enjoyed a seller's market for their catches (especially albacore) over the past month, but present prices tend to decline with the end of the albacore season and following the brisk competition for fish which recently prevailed between the exporters of frozen tuna and canners of tuna.

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**FROZEN TUNA EXPORTS, 1947-52:** Total Japanese exports of frozen tuna (albacore, skipjack, and yellowfin) in 1952 amounted to 26,905 short tons, valued at US\$7,850,249 f.o.b. Japan (see table), a June 22 U. S. Embassy dispatch from Tokyo points out.

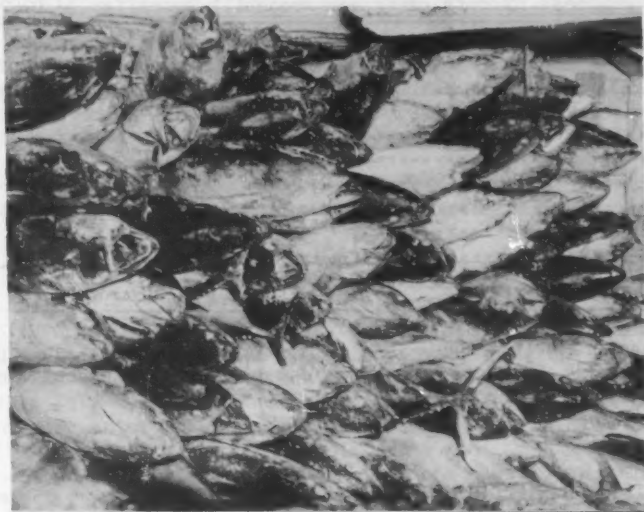
Japanese Exports of Frozen Tuna, 1947-52										
Year	Albacore			Skipjack			Yellowfin			Total
	Quantity	Value	Avg. Price/Per Short Ton	Quantity	Value	Avg. Price/Per Short Ton	Quantity	Value	Avg. Price/Per Short Ton	Quantity
	Short Tons	US\$	f.o.b. Japan	Short Tons	US\$	f.o.b. Japan	Short Tons	US\$	f.o.b. Japan	Short Tons
1952 .....	22,711	6,924,047	305	702	127,698	210	3,492	778,504	223	26,905
1951 .....	16,068	4,773,656	297	1,067	188,505	177	1,251	298,646	218	18,386
1950 .....	7,331	2,346,190	323	1,721	354,130	200	1,225	299,163	244	10,227
1949 .....	1,306	412,689	317	80	16,859	210	-	-	-	1,386
1948 .....	1,142	528,990	463	43	11,180	260	-	-	-	1,185
1947 .....	-	-	-	-	-	-	-	-	-	-

1/NDT A WEIGHTED AVERAGE PRICE.

2/NO EXPORTS OF FROZEN TUNA IN 1947.

This is an increase of 46 percent in quantity and 49 percent in value as compared to the 1951 exports of 18,386 short tons, valued at US\$5,260,807 f.o.b. Japan. Practically all of the tuna exports were shipped to the United States.

Albacore is the leading frozen tuna species shipped out of Japan and comprised 84 percent of the shipments in 1952. Shipments of albacore have increased sharply in recent years: in 1949 only 1,306 short tons of albacore were exported, as compared with 22,711 short tons in 1952.



WHOLE YELLOWFIN TUNA FROZEN AND STACKED IN A COLD STORAGE HOLD.

The average price f.o.b. Japan of all frozen tuna exported from Japan in 1952 was US\$292 per short ton, 2 percent above the US\$286 reported for 1951. This is the first price increase in the past five years—from 1948 through 1951 the price f.o.b. Japan had been steadily declining.

\*\*\*\*\*

A NUMBER OF LARGE TUNA VESSELS TO BE BUILT IN 1953: Applications have been filed with the Japanese Government for the construction of 18 large tuna vessels in 1953, states a June 22 U. S. Embassy dispatch from Tokyo. These vessels will average from 300 to 450 gross tons each. Some financial assistance is expected from Japanese Government banking institutions.

The boats are intended for the more distant areas of the equatorial Pacific waters. Two tuna boats in the 400-gross ton class recently completed will be used as carriers for the salmon expedition now operating in the North Pacific. At the end of the salmon season in late August, the boats will shift to tuna fishing in the equatorial and adjacent southern waters.

The construction of large-sized tuna boats continues the trend, begun last year, for boats capable of exploring and fishing the more distant areas of the central and south Pacific and Indian Oceans.

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FROZEN BROADBILL SWORDFISH EXPORTS, 1947-52: Japanese exports of frozen broadbill swordfish in 1952 amounted to 3,701 short tons, valued at US\$2,490,973 f.o.b.

Japan (see table), a June 22 U. S. Embassy dispatch from Tokyo reports. This is a decrease of 39 percent in quantity and 34 percent in value when compared with 1951 exports of 6,060 short tons, valued at US\$3,762,340 f.o.b. Japan. Also, it is the first decline in frozen swordfish shipments out of Japan since 1947.

Japanese Exports of Frozen Broadbill Swordfish, 1/ 1947-52			
Year	Quantity	Value	Avg. Price 2/
		..... f.o.b. Japan .....	per pound
	Short Tons	US\$	U.S. Cents
1952 .....	3,701	2,490,973	26
1951 .....	6,060	3,762,340	30
1950 .....	3,263	1,539,012	23
1949 .....	1,569	825,356	26
1948 .....	1,165	813,725	35
1947 .....	312	187,200	30

1/ DOES NOT INCLUDE STRIPED MARLIN AND BLACK SWORDFISH.  
2/ NOT A WEIGHTED AVERAGE PRICE.

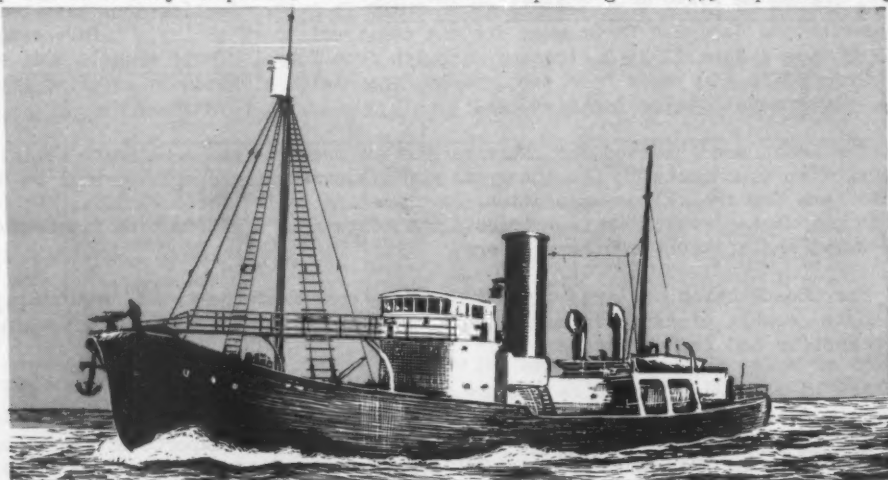
The average price (unweighted) of frozen broadbill swordfish exported from Japan in 1952 was 26 U. S. cents per pound, f.o.b. Japan, 13 percent lower than the price of 30 U. S. cents for 1951.

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NORTH PACIFIC CRAB FISHING EXPEDITION ATTAINS GOAL: About 95 percent of the goal fixed for the current season has been attained by the Japanese crab fishing expedition operating in Bristol Bay, announces the Nippon Times in its July 27 issue. The total catch as of July 27 was 1,032,257 crabs, and the canned crab meat produced by the factoryships amounted to 39,438 cases of first-grade and 8,902 cases of third-grade products.

\* \* \* \* \*

ANTARCTIC WHALING EXPEDITION RETURNS: Main units of the Japanese Antarctic Whaling Expedition returned to Japan on April 13 and 14, an April 23 U. S. Embassy dispatch from Tokyo reports. The two fleets comprising the 1953 expedition began



JAPANESE WHALE CATCHER.

baleen whaling on January 2 and ended operations on March 16, in accordance with International Whaling Regulations. On the basis of preliminary data, the expedition produced 34,100 metric tons of whale oil, 24,082 tons of meat, and 968 tons of other products. These figures include the 3,830 tons of frozen whale meat lost with the sinking of the refrigerated vessel Settau Maru on March 7.

The fleet headed by the factoryship Nisshin Maru reached a total production of 35,349 metric tons of all products, as compared with its target of 35,525 tons. The fleet headed by the factoryship Tonan Maru achieved a total production of 23,801 metric tons (including the 3,830 tons of whale meat lost), approximately 23 percent below the fleet's target of 31,059 tons.

Managers of each fleet were in accord in emphasizing the need for more modern, larger, and faster catcher boats to compete more successfully with the fleets of other nations.

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REGULATION OF TRAWLING IN SOUTH CHINA SEA CONTINUED: Regulations controlling Japanese trawling in the South China Sea will be continued, the Japanese Fisheries Agency recently announced. These regulations were applied by the Agency as a temporary measure in July 1952 when Japanese fishing boats petitioned the Government for permission to re-enter these prewar high-seas fishing grounds. The regulations, in part, require that special approval be obtained from the Government (Fisheries Agency) for operating in that area. The regulations make it possible for the Government to limit the number of boats and otherwise to supervise operations in the interest of maintaining good international relations. Landings are made directly at Japanese ports. The boats of the authorized fleet are not permitted to call at foreign ports either to land fish or to obtain operating supplies.

The fleet reached a total of 12 otter trawlers and 20 pairs of bull trawlers in the early part of 1953. A complete record of the catch is not readily available, but reports indicate that the project is commercially successful, states a United States Embassy dispatch from Tokyo dated July 15, 1953.

Also operating in part of the South China Sea are at least two Japanese fishing boats landing their catches directly at Hong Kong. These craft operate under a different authorization of the Japanese Government and with special permission of the Hong Kong authorities.



## Mexico

SHRIMP ASSOCIATION RESOLVES THAT U. S. SHRIMP VESSELS WILL NOT FISH WITHIN NINE MILES OF MEXICAN COAST: The Mexico City press carried front-page articles and editorials praising the 3rd Annual Convention of the Shrimp Association of the Americas for its decision to obtain the cooperation of the United States shrimp vessels not to fish within nine miles of the Mexican coast. The press reports speculated that this decision may be followed by formal recognition of Mexico's claim to nine miles of territorial waters.

The Mexico City press (Excelsior, July 24) stated further "...Washington at present is studying the basis for a Mexican-North American treaty whereby the owners of fishing vessels formally will agree not to fish within ten miles.... In exchange for this, United States shrimp fishermen have asked that Mexico establish two refuge

zones near Tampico and Campeche where fishermen might seek shelter from storms without exposing themselves to detention by Mexican gunboats...."

Excelsior attributed the above statements to the President of the "International Commission" of the Shrimp Association of the Americas and the Vice-President of a Brownsville company.

Reports indicated that American members of the Shrimp Association have sent to the U. S. Department of State a memorandum setting forth the need for respecting Mexico's nine-mile limit and requesting that a formal agreement to that effect be entered into with the Mexican Government.

According to the press reports, the 3rd Convention of the Shrimp Association of the Americas was attended by 37 American and 19 Mexican representatives of fishing industries, a July 30 U. S. Embassy dispatch from Mexico City points out.

Vessels found in Mexican territorial waters do not infringe Mexican fishing laws unless they are found with nets in the water.



## Netherlands

FLOOD VICTIMS TO RECEIVE ICELANDIC FISH FILLETS: The Netherlands Red Cross has been informed by the Icelandic Red Cross that a consignment of frozen fish fillets, valued at 500,000 Icelandic kroner (US\$30,600) will be shipped to the Netherlands for victims of this year's flood disaster. According to authorized Netherlands sources, it is intended to make the shipment through normal commercial channels on the Netherlands market. It is estimated that about 250,000 pounds of fillets will be shipped, reports the May 1953 Trade News of the Canadian Department of Fisheries.



## New Guinea

TUNA INVESTIGATIONS: A tuna clipper operated by the Government of Netherlands New Guinea is investigating tuna fishing in the waters north of Netherlands New Guinea. Investigations in the Arafura Sea, south of New Guinea, will be made shortly by a trawling cutter, reports the Pacific Science Association in its July 1953 Information Bulletin.



## Peru

CANNED FISH EXPORTS TO THE U. S., 1951-52: Peruvian exports of canned fish to the United States in 1952 amounted to 21,040,532 pounds, valued at 62,017,882 soles (US\$4,016,702), reports a July 8 U. S. Embassy dispatch from Lima. This is a 25 percent increase in quantity and a 14 percent increase in value as compared with 1951 shipments of 16,812,959 pounds, valued at 54,543,306 soles (US\$3,616,930). The United States received 76 percent of all Peruvian canned fish exports in 1952 and 85 percent in 1951.





## Portugal

FISH CANNING, 1952: The year 1952 proved to have been a difficult one for the Portuguese fish-canning industry, a July 3 United States dispatch from Lisbon points out. This was true in spite of the fact that sardines had returned to the fishing areas in large volume and ample tinplate stocks were available. Although more fish were caught in 1952, ex-vessel prices remained high but export quotations dropped substantially.

Total Portuguese canned fish exports in 1952 amounted to 38,674 metric tons, valued at 650,541 contos (US\$22,469,000) as compared to 1951 exports of 31,186 tons, valued at 584,681 contos (US\$20,195,000). These statistics indicate a drop in export value.

A total of 23,899 metric tons of canned fish was produced in 1952 as compared with 19,639 tons in 1951.

\* \* \* \* \*

LOAN FUND FOR FISHING INDUSTRY: The Portuguese Government has established a Fund for the development and modernization of the fishing industry, a July 24 U. S. American Embassy dispatch from Lisbon reports. The purpose of the fund is to modernize and develop the Portuguese fishing industry, and provide loans for any fisheries activity. It was established by Decree Law No. 39,283 published in the Diario do Governo of July 20, 1953

The Fund will be directed by an administrative committee made up of the Government delegate to the corporative organizations of fisheries, a representative of the fishing gremios chosen by the Ministry of Marine, and a representative of the Ministry of Finance. The Fund is authorized to borrow up to 250,000 contos (US\$8,625,000) through the sale of obligations amortizable in 12 annual installments beginning 3 years from the date of issue. These obligations will be sold through the Government Savings Bank, commercial banks, or direct to the public.

The Fund will make loans at 3.75 percent, also repayable in 12 annual installments beginning 3 years from the date of the loan, and secured by mortgage on the vessels or other property acquired with the loan. In the case of loans made for the construction of new vessels, they will be granted up to 75 percent of the value of the vessel, with the condition that it must be built in Portugal unless it is of a type that cannot be built by Portuguese shipyards.

This fund will operate very much like the Merchant Marine Loan Fund, which was established in 1946 and which has been very successful in helping shipping companies build up a Portuguese merchant marine. The requirement that the ships be built in Portugal is a new one, however.



## Republic of the Philippines

FISHERY PRODUCTS IMPORTS, 1951: Philippine importations of fishery products in 1951 were valued at ₱25.4 million (US\$12.7 million). Of this amount, imports from the United States accounted for ₱23.1 million (US\$11.5 million).

Canned fish is subject to a duty 30 percent ad valorem. Smoked, dried, and salted fish are subject to specific duties at varying rates, generally averaging approximately 25 percent ad valorem. Fish meal is duty free.

Philippine Fishery Products Imports, 1951		
	Millions of Pesos	Millions of US\$
Fresh fish .....	.008	.004
Canned .....	23.450	11.725
Smoked, dried .....	.772	.386
Fish meal .....	1.136	.568

Importations of fresh fish are negligible, imported almost entirely from China and Hongkong, 80 percent of all imports of canned fish consist of sardines, imported almost entirely from the United States. Salmon is the

second largest canned item of importation and Canada presently supplies 56 percent of the total value of P1.9 million (US\$950,000) of canned salmon.

Importations of fish meal in 1951 valued at P1.4 million (US\$700,000) were almost entirely from the United States.



## Spain

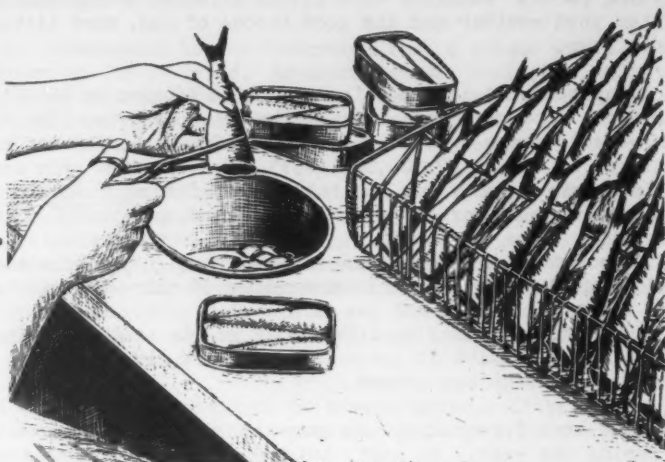
FISH CANNERS PREDICT POOR PACK: The closed season on sardine fishing—March 1 to April 30—failed to produce a return of former sardine runs, the Spanish fish canners in the Vigo District report. The fish packers' outlook for 1953 is gloomy, although heavy sardine catches do not normally begin until later in the season, states a U. S. consular dispatch from Vigo. One packer went so far as to say that the Spanish fish canning industry has already passed into history. Pessimism is mitigated, however, by the hope that the season run of albacore, which usually begins the last part of June, will be good, and by the report that multiple export exchange rates are to be replaced by a single exchange rate.

Fish purchases by the fish canners in the Vigo District during May totaled 211,600 pounds as compared to 35,200 pounds in April and 338,000 pounds in May 1952. May 1951 purchases amounted to 367,800 pounds and May 1950 purchases were 634,300 pounds.

\* \* \* \* \*

FISH CANNING TRENDS, JUNE 1953: Fish canning activities in the Vigo area of Spain during June showed a substantial increase over the previous month. Plants in general only operated at an estimated 15 percent of capacity production in spite of the fact that the canners took advantage of all canning fish available. The fish canning industry which is stocked with the largest supplies in some years of the principal raw materials: tin plate, oil, etc., finds itself still blocked because of the continued scarcity of sardines. In an effort to keep factories operating, sardines from the Mediterranean coast were brought overland by truck to Galicia for canning during the period, for the first time in the history of the canning industry. This experiment has not been successful, however, since due to the slow transportation, excessive brine, and the lack of fat in the fish, the finished product has turned a dark color which, if sold abroad, would be prejudicial to the prestige Spanish canned fish enjoys in foreign markets. It is believed, therefore, that the small quantity that has been processed will have to be disposed of at a loss in the domestic market.

The fish canning association of Galicia, the most outstanding in Spain, is keeping in close contact with the authorities in Madrid regarding measures which would permit increased exports (if canning fish become available), which is the principal trade of the industry. Canning operational costs and fictitious export exchange rates have been long standing obstacles to the industry's export trade, as a result of which in the foreign markets its products are quoted at eight or nine U. S. dollars per case over prices quoted by the Portuguese industry, its principal competitor. In order to meet this problem the industry is and has been working to obtain an export exchange rate of at least 40 pesetas to one dollar and a reduction in taxes over a period of at least three or four years.



PRODUCTION LINE IN SPANISH SARDINE CANNERY. WOMEN TAKE FISH FROM SPECIAL SHAPED WIRE BASKETS, CUT TO CONVENIENT SIZE, AND PACK IN CANS. FISH ARE PLACED IN THE BASKETS DIRECTLY FROM THE BRINE TANK.

Purchases by the fish canners during June 1953 totaled 7,712,000 pounds as compared to 2,116,000 pounds in May 1953, 16,079,000 pounds in June 1952, 20,152,000 pounds in June 1951, and 10,350,000 pounds in June 1950.



## United Kingdom

MARKETING AND DISTRIBUTION RECOGNIZED AS MAJOR PROBLEMS IN SECOND REPORT OF BRITISH WHITE FISH AUTHORITY: Marketing and distribution are recognized as major problems for the British fishing industry by the White Fish Authority in its second annual report (to March 31, 1953). The report discusses landings, the publicity campaign to increase consumption, rebuilding of the fishing fleet, regulation of imports, freezing-fish-at-sea research, marketing and distribution, the position of wholesalers, and costs and earnings.

The British fishing industry will shortly be consulted on a scheme to insure more stable prices for inshore fishermen. This will be introduced only where the prevailing opinion of fishermen is in favor of it, reports a July 29 U. S. Embassy dispatch from London.

The main points of the report are:

The year 1952/53 was difficult for all sections of the industry. The operations of the distant-water fleet were further restricted by the Icelandic Government's decision to close fishing grounds which had for many years been open to vessels of all nations. This led to a protracted dispute between the British and Ice-

landic Governments which has not yet been settled, and also to the ban on the landing of Icelandic fish in Britain which has been imposed by the industry at the main fishing ports. Supplies were little affected by the ban and total landings, because of the good weather and the good broods of cod, were little different from the previous year.

Catch: Total landings in the United Kingdom in 1952/53 were about 886,000 metric tons, 5 percent less than in the previous year. The white fish landed by British vessels was slightly up by about 8,000 tons, but the value of the total catch declined by almost £2,000,000 (US\$5,600,000). The only section to show an increase in both weight and value was the inshore fishery. Imports of foreign-caught fish declined from 16 percent of the total landings in 1951/52 to 11 percent in 1952/53.

The number of distant-water vessels slightly increased, but there was a marked decline of about 7 percent in the number of near- and middle-water vessels.

The Authority has no information on the costs and earnings of the distant-water section, a gap which it proposes to fill by carrying out a cost investigation after consultation with the owners.

The loss incurred by the near- and middle-water vessels as a whole rose steeply during the year. In part, this may be attributed to the overfishing of the waters where these boats fish. The Authority welcomes the decision of all the countries concerned to enforce in full the 1946 Convention from April 1954, but hopes that this step will be followed by other conservation measures.

Publicity Campaign: The serious decline in values has reflected a marked fall in the demand for fish by the consumer.

To increase consumption, the Authority decided to launch a publicity campaign, and, for the financial year 1953/54, appropriated £80,000 (US\$224,000), which will be spent largely on press advertising and displays in the retailers' and fishfriers' shops. The campaign began in the spring of 1953. A simultaneous campaign is being run by the British Trawlers' Federation for fillets, but care has been taken to avoid overlapping of effort.

Rebuilding the Fleet: The Authority announced during the year its arrangements for making loans for the construction of new fishing vessels for the near, middle, and inshore waters, and for building or improving processing plants. It expected little response in regard to fishing vessels, as it had concluded that loans would be insufficient to promote rebuilding. This view was put to and accepted by the Government.

A Bill was introduced in December 1952, which has been recently enacted as the White Fish and Herring Industries Act, 1953. This provides for the making of grants by the Authority for the construction of new boats of not more than 140 feet in length and, in certain cases, for new motors. The scheme has still to be approved by Parliament, but the Authority has completed administrative arrangements for dealing with applications.

A prospective boat owner will still be eligible to receive a loan as well as a grant, and, as at the outset he will normally have to find from his own resources only 15 percent of the total cost of the vessel, the Authority trusts that these arrangements will lead to a great step forward in the rebuilding of the fleet.

Regulation of Imports: The Authority, while recognizing that imports are essential at certain times of the year for the proper supplying of the market, considers that regulation is desirable.

It would be unsatisfactory, after the present dispute over fishery limits is settled, to return to the unregulated and sudden gluts which cause loss both to the British catcher and the foreigner.

In February 1953, it recommended to the Government that a scheme for regulating imports should be drawn up and operated. As such a scheme would, in order to comply with the General Agreement on Tariff and Trade, require an equivalent statutory restriction on British landings, it discussed the matter during the year with the Humber distant-water owners; no conclusions have yet been reached.

Freezing Fish-at-Sea Research: Cooperation between the Authority and the Department of Scientific and Industrial Research into fish problems has continued. Among the problems being studied is the refrigeration of fish at sea. Preliminary work has been carried out at Torry. Recently it has been agreed in principle that a distant-water trawler should be fitted out experimentally in order to determine whether it is practicable and economic to freeze at sea the early part of the catch, and that the cost of this experiment should be shared equally between the Treasury, the Authority, and the distant-water owners.

"The importance of this experiment cannot be overestimated. If it proves successful and capable of extension, there will be a vast improvement in the quality of a great part of the distant-water landings."

The Authority has also set up a Technical Committee, which includes scientists, vessel owners, builders, skippers, and engineers, to review research on the preservation of fish at sea, and proposes to set up other committees of this kind to deal with practical aspects of research problems.

Marketing and Distribution: The Authority states that it will shortly consult the industry on a scheme designed to insure more stable prices to inshore fishermen and to spread their earnings more evenly over the year; it will be introduced at ports where the prevailing opinion of the fishermen is in favor of it.

The Authority is also considering a scheme to improve the return of fish boxes, of which the box pools at the ports suffer serious losses.

The Authority's Frozen Fish Scheme, which was published in the Autumn of 1952, has been postponed in order to allow for further consultation with the quick freezers, who objected not to the principle, but to the terms of the proposals put forward. It would have been impracticable for any freezing scheme to have been introduced in the present summer. The Authority has appointed five inspectors of freezing, who are undergoing a year's training before taking up their duties.

The Authority has decided to erect and operate a fish-meal factory in the South West of England; negotiations for a site at Plymouth are taking place.

As a preliminary step towards the introduction of statutory regulations, the Authority has prepared two Codes of Practice; the first, "Handling of Fish on Shore," covering the wholesale stages of distribution; the second, "Freezing of Fish."

Scotland and Northern Ireland: The Authority, in August 1952, appointed the Committee for Scotland and Northern Ireland as its instrument for carrying out its statutory duties in those countries. The Committee has been active in the past year in encouraging the formation of mutual trading organizations at inshore ports, and in one or two cases is considering the granting of financial assistance to such bodies.



The Committee has also discussed with the interests concerned at Aberdeen the implementation of the recommendations of the McColl Committee for the rationalization of the Aberdeen fishing fleet and for setting up a marketing organization at that port. No conclusions have yet been reached.

Costs and Earnings: The report includes the general results of the Authority's investigation during the year into costs and earnings of certain sections of the industry. One of the investigations made was into the inshore fishing industry. In the year ended July 31, 1952, the owners of the 110 vessels in the sample made a total net profit (after taking account of the subsidy) of £27,491 (US\$77,000); without subsidy the profit would have been only £4,474 (US\$12,500). The average earning of the crews of these boats was £445 (US\$1,246) with subsidy, and £385 (US\$1,078) without it.

The two other sections examined were the coastal and inland wholesalers. The 60 coastal merchants in the sample earned in the calendar year 1951 a total net profit of £89,896 (US\$251,700) or 1.2 percent of their gross sales. This compares with a loss of £1,184 (US\$3,300) or 0.024 percent of gross sales in 1950. The 54 inland wholesalers examined had a net profit of £86,876 (US\$243,300) or 0.79 percent of gross sales in the twelve months ended June 30, 1952; this compared with £58,722 (US\$164,400) or 0.9 percent of gross sales in the preceding year.

Investigations into other sections are taking place, but the Authority states that, as an insufficient number of firms are volunteering to lay open their books and records for the purpose, it intends to enforce in the near future the statutory powers granted by the 1951 Act.

Position of Wholesalers: Statistical information is given about the number, facilities, and activities of coastal and inland wholesalers, collected as a result of the registration of these traders which the Authority carried out in 1952. There are 2,300 registered premises where a coastal wholesale business is carried on, and 1,053 where an inland wholesale business is carried on; these figures take no account of a large number of premises where the wholesale activities are less than 10 percent of the total business. Appendices to the Report contain an analysis of the numbers and facilities by ports and markets.

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HERRING PROCESSED TO RESEMBLE SALMON: Processing herring to resemble salmon in taste, smell, and appearance is reported from Fraserburgh (Scotland), states the May 1953 Fish Industry, a British trade magazine.

Research has been progressing in this direction for some time. It is indicated that only experts can tell the origin of the new pack, and then only by texture. Initial tests have proved that the new herring-converted-to-salmon pack will have a good demand and plans are being made for an expansion of production to exploit the process. It is claimed that the process eliminates the defects which limit the sale of canned herring, without eliminating any of the nutritional value of the fish.

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BRITISH-RUSSIAN FISHERY PRODUCTS TRADE AGREEMENT: The British and Russian Governments have concluded a trade agreement involving fishery products, the Secretary of State for Scotland announced in the British House of Commons on June 30 in answer to an oral question. Terms similar to those of 1952 were arranged: cured herring to the value of £973,000 (US\$2,724,000) would be shipped to Russia, together with enough tin plate to pack the canned crab meat and salmon which the British Ministry of Food

will receive from Russia in a counterpart agreement of equivalent value. It is estimated that the value of the tin plate would be £117,000 (US\$327,600), reports a July 7 U. S. Embassy dispatch from London. The canned crab meat that Russia will ship is estimated at 50,000 cases or about 1,070 metric tons. The quantity of salmon will depend upon the sizes and types to be supplied.

The Herring Industry Board has released the figure of cured herring to be supplied to the world markets in 1953 as about 280,000 barrels of this year's production, as against the total of 177,000 barrels for 1952. The proportion of this total which will go to Russia by the 1953 agreement has not been divulged, but it is estimated that not less than 180,000 barrels will be involved. There is still a shortfall of 38,000 barrels on the 1952 agreement to be made up. This was caused by the poor autumn season in East Anglia and the acute shortage of labor in the North-East Scottish ports during the bumper summer season. As these same Scottish ports were again enjoying fine summer fishing, they have already begun curing in order to take care of the previous year's shortfall as well as the new contract. For this purpose the labor force at these ports has been increased and a number of herring-gutting machines have been hired from the Herring Industry Board to augment the manual laborers. There is no doubt that the contract with the U.S.S.R. is valued by the herring industry in the United Kingdom as the one substantial outlet for the bulk of the herring catches.

Comment on the agreement by Government Members in the British House of Commons indicated that "lively satisfaction" would be felt, not only in the herring fishing industry but in other circles as well. Opposition Members, however, professed to be disappointed that canned crab meat, which was priced out of reach of the ordinary people at 3s. 9d. (44 U. S. cents) for a 3-ounce can, should have been taken instead of timber or coarse grains, and intimated that the best bargain had not been struck with Russia.

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FISHING PRIVILEGES OFF NORTHERN COAST OF RUSSIA EXTENDED: The British Foreign Office announced that the Russian Government has agreed to the extension of the fishing agreement between the two countries for another year. This Pact, which has been in force since 1930, allows British trawlers to fish up to within three miles of the Russian White Sea coast instead of the twelve-mile limit imposed on all other countries. In conformity with the terms of the Pact, Russia announced in January the intention to terminate the agreement on June 30, thus giving the requisite six months' notice. The agreement to extend the Pact was reached at the last moment but it is known that representations were made to Moscow some months ago, a July 7 U. S. Embassy dispatch from London points out.

The immediate result of Russia's extension of the 1930 Pact will be to relieve the British fishing industry of the threat of further restriction imposed upon it by a foreign country.

Russia's earlier move, if carried to its conclusion, would have deprived British fishing interests of 3,000 square miles of fishing grounds with a loss of some 28,000,000 pounds of plaice and haddock each year. It is hoped that the delay will enable the two countries to discuss further arrangements that will be mutually beneficial.

NOTE: SEE COMMERCIAL FISHERIES REVIEW, APRIL 1953, P. 59.

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TRAWLERS SOLD TO ITALIAN FIRM: Four more Granton trawlers have been sold to an Italian company because of the depressed situation of the Granton industry, reports the May 1953 Fish Industry, a British trade magazine. The owners have disposed of the four because of the continuing serious position and poor prospects of the Granton fleet. This further sale depletes the Granton (Scotland) fleet still more and emphasizes the difficulties which owners in this area are facing through rising costs and poor consumer demand. The sale of two of their trawlers to Italian owners some weeks earlier aroused opposition from the port, but there were no concrete alternative propositions.



## Venezuela

PEARL CROP, 1953: The Venezuelan pearl crop in 1953 has been announced by the Fisheries Division of the Ministry of Agriculture as 978,391 karats, valued at bolivares 1,314,692 (US\$392,400). Of this total, 316,096 karats, valued at bolivares 597,285 (US\$178,300) are in the hands of dealers. The crop is reported as satisfactory. No data are available on the number of pearl fishers engaged, reports a July 7 U. S. Embassy dispatch from Caracas.

The Managing Director of the Banco Agricola y Pecuaria stated that his institution would not purchase this year's collection of pearls unless the Venezuelan Government requests it. The Managing Director announced that the current stock of pearls from past harvests now in the Bank's vaults is valued at bolivares 1,698,000 (US\$507,000). There is almost no market for these since France and India, the principal prewar buyers, are no longer seeking pearls. Efforts have been made to dispose of them in Hong Kong and other oriental centers, but without much success. The Bank feels that the amount of money frozen in these jewels is too high.

A total of 250,000 karats of seed pearls were sold in Europe and 50,000 in the United States plus 30,000 baroque. Also, some pearls have been sold in other Venezuelan cities.



## HELICOPTER IS USEFUL AS WHALE-SPOTTER

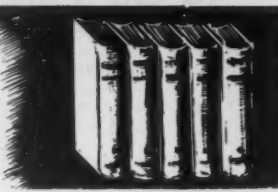
### DO YOU KNOW THAT:

When the whaling factoryship Norhval arrived at Cape Town recently there was high praise for the usefulness of the helicopter carried aboard. On one occasion a school of 200 whales was spotted by the pilot.

... World Fishing, June 1953



# FEDERAL ACTIONS



## Department of State

HEARINGS SCHEDULED ON JAPAN'S APPLICATION FOR TEMPORARY ACCESSION TO GATT, AND PROPOSED EXTENSION OF FIRM LIFE OF GATT TARIFF CONCESSIONS: Public views have been requested regarding two proposals scheduled to be considered at the September 17 session of the Contracting Parties to the General Agreement on Tariffs and Trade to be held in Geneva, reports an August 27 release from the U. S. Department of State. The two proposals are (a) Japan's application for temporary accession to the General Agreement, and (b) extension of the date after which Article XXVIII of the Agreement may be invoked (to continue firm life of individual tariff concessions in the Agreement).

In view of the fact that full-scale tariff negotiations are not possible at the present time, Japan has asked that it be permitted to accede to the General Agreement on a temporary basis. Under such temporary accession, the United States and other contracting parties would apply to Japan, for such time as may be agreed upon, the provisions of the Agreement (including the schedules containing the tariff concessions) in return for the application to them by Japan of such provisions and for commitments with respect to Japan's tariff. Under the proposal, the accession would not involve the modification of any United States tariff rates nor the addition to the Agreement of any new articles imported into the United States.

Article XXVIII now provides that the concessions on individual products, negotiated at Geneva in 1947, at Annecy in 1949, or at Torquay in 1950 or 1951, may be modified or withdrawn on or after January 1, 1954, following consultation and negotiation with other contracting parties, without the necessity of terminating the entire agreement. To the extent that agreement is reached to extend the date, it would mean that concessions could not be modified or withdrawn by the procedure provided for in that article until such new later date. In 1951 the date was extended from January 1, 1951, to January 1, 1954. No extension of this date in Article XXVIII will affect the right of any contracting party to withdraw or modify individual concessions pursuant to Article XIX (commonly called "the escape clause") of the General Agreement.

Interested persons were invited to express views with regard to any aspect of these two proposals. Such views were to be considered before a final decision was reached as to the United States position on these proposals. Written views were to be submitted to the Committee for Reciprocity Information by September 10, 1953. Public hearings opened on September 14 in the Tariff Commission Building, Washington, D. C.

\* \* \* \* \*

TOKYO FISHERY ATTACHE POST ABOLISHED: Due to a curtailment in appropriations, the State Department late in August abolished the position of Fishery Attache in the U. S. Embassy at Tokyo, Japan. Wm. C. Neville has held this position since it was first established early in 1952, and has provided the U. S. fisheries with information on current developments in the Japanese fisheries.

The State Department has advised that, in the future, current data on the Japanese fisheries will be reported by the economic staff in the Embassy at Tokyo.



## Eighty-Third Congress (1st Session)

AUGUST 1953

Listed below are public bills and resolutions introduced and referred to committees or passed by the Eighty-Third Congress (First Session) and signed by the President that directly or indirectly affect the fisheries and allied industries. Public bills and resolutions are shown in this section only when introduced and, if passed, when signed by the President; but also shown are the more pertinent reports, hearings, or chamber actions on some of the bills shown in this section from month to month.

First session of the 83d Congress adjourned sine die after clearing various bills for the President.

### BILL INTRODUCED:

**Tuna Import Duties:** Introduced in House H. R. 6816 (Utt) - a bill to amend the Tariff Act of 1930, so as to impose certain duties upon the importation of tuna fish, and for other purposes; to the Committee on Ways and Means. Same as H. R. 6512 (see *Commercial Fisheries Review*, August 1953, p. 48). Revises H. R. 6348.

### BILLS PASSED:

**Prevention of Collisions in Inland Waters:** Senate passed without amendment and cleared for President, H. R. 2234, to amend the rules for the prevention of collisions on certain inland waters of the U. S.

**Presidential Authority to Enter into Trade Agreements:** Committee of Conference reported to the House H. R. 5495 - a bill to extend the authority of the President to enter into trade agreements under section 350 of the Tariff Act of 1930, as amended (Rept. No. 1089). House adopted the conference report and sent the measure to the Senate. Results of the conference were: (1) the House receded in its disagreement to the Senate amendment providing that the enactment of H. R. 5495 expresses neither approval nor disapproval of General Agreement on Tariffs and Trade; (2) the House receded, with a clerical change, in its disagreement to the Senate provision amending section 22 (b) of the Agricultural Adjustment Act which provides for emergency action by the President without awaiting the recommendations of the Tariff Commission; (3) the conferees agreed to keep the membership of the Tariff Commission at six; and also agree that in votes as to whether investigations or hearings shall be held resulting in a tie, such proceedings shall occur; (4) the House receded with an amendment in its disagreement to the Senate provision that a quorum of the Commission on Foreign Economic Policy shall consist of 9 members, of whom at least 5 shall be Members of Congress; (5) the House receded with an amendment in its disagreement with the Senate on the provision pertaining to

the general statement of the scope of the commission's study. The amendment provides that the Commission is directed to examine, study, and report on the subjects of international trade and its enlargement consistent with a sound domestic economy, our foreign economic policy, and the trade aspects of our national security and total foreign policy; and to recommend appropriate policies, measures, and practices.

Senate adopted conference report and cleared H. R. 5495 for the President.

### CHAMBER ACTION:

**Food and Drug Factory Inspection:** House voted to disagree to a Senate amendment to H. R. 5740, to amend the Federal Food, Drug, and Cosmetic Act, so as to protect the public health and welfare by providing certain authority for factory inspection and returned the bill to the Senate.

### BILLS SIGNED BY THE PRESIDENT:

**Customs Simplification:** H. R. 5877 - An act to amend certain administrative provisions of the Tariff Act of 1930 and related laws, and for other purposes (P. L. 243). The act modernizes the administrative and procedural provisions of the customs laws and does not change any classifications or rates of duty.

**Food and Drug Factory Inspection Authority:** H. R. 5740 - An act to amend the Federal Food, Drug, and Cosmetic Act, so as to protect the public health and welfare by providing certain authority for factory inspection, and for other purposes (P. L. 217). This Law authorizes (a) officers or employees duly designated by the Secretary, upon presenting appropriate credentials and a written notice to the owner, operator, or agent in charge, are authorized (1) to enter, at reasonable times, any factory, warehouse, or establishment in which food, drugs, devices, or cosmetics are manufactured, processed, packed, or held, for introduction into interstate commerce or are held after such introduction, or to enter any vehicle being used to transport or hold such food, drugs, devices, or cosmetics in interstate commerce; and (2) to inspect at reasonable times and within reasonable



limits and in a reasonable manner, such factory, warehouse, establishment, or vehicle and all pertinent equipment, finished and unfinished materials, containers, and labeling therein. A separate notice shall be given for each such inspection, but a notice shall not be required for each entry made during the period covered by the inspection. Each such inspection shall be commenced and completed with reasonable promptness.

(b) Upon completion of any such inspection and prior to leaving the premises, the officer shall give to the owner, operator, or agent in charge a report in writing setting forth any conditions or practices observed by him which, in his judgment, indicate that any food, drug, device, or cosmetic in such establishment (1) consists in whole or in part of any filthy, putrid, or decomposed substance, or (2) has been prepared, packed, or held under insanitary conditions whereby it may have become contaminated with filth, or whereby it may have been rendered injurious to health.

(c) If the officer has obtained any sample in the course of the inspection, upon completion of the inspection and prior to leaving the premises he shall give to the owner, operator, or agent in charge a receipt describing the samples obtained.

(d) Whenever in the course of any such inspection the officer obtains a sample of any such food, and an analysis is made of such sample, a copy of the results of such analysis shall be furnished promptly to the owner, operator, or agent in charge.

**Interior Appropriations:** H. R. 4828, Interior (including Fish and Wildlife Service) appropriations for fiscal year 1954. Signed July 31, 1953 (P. L. 172). (While the Branch of Commercial Fisheries of the U. S. Fish and Wildlife Service will still take a reduction of about \$29,000 from the budget estimate, it will be possible in the current fiscal year to conduct all of the regular activities of the Branch at approximately the levels originally planned.)

**Northern Pacific Halibut Act Amendment:** S. 2434, to amend the Northern Pacific Halibut Act of 1935. Makes changes in the original act to conform to the Convention between the United States of America and Canada for the Preservation of the Halibut Fishery of the Northern Pacific Ocean and Bering Sea, signed at Ottawa, March 2, 1953. (P. L. 228)

**Outer Continental Shelf:** H. R. 5134 - An act to provide for the jurisdiction of the United States over the submerged lands of the outer Continental Shelf, and to authorize the Secretary of the Interior to lease such lands for certain purposes. (P. L. 212). This law defines the policy of the United States as that the subsoil and seabed of the outer Continental Shelf appertain to the United States and are subject to its jurisdiction, control, and power of disposition as provided in this Act. This Act shall be construed in such manner that the character as high seas of the waters above the outer Continental Shelf and the right to navigation and fishing therein shall not be affected. The Constitution and laws and civil and political jurisdiction of the United States are hereby extended to the subsoil and seabed of the outer Continental Shelf and to all artificial islands and fixed structures which may be erected thereon for the purpose of exploring

for, developing, removing, and transporting resources therefrom, to the same extent as if the outer Continental Shelf were an area of exclusive Federal jurisdiction located within a State: Provided, however, That mineral leases on the outer Continental Shelf shall be maintained or issued only under the provisions of this Act.

**Prevention of Collisions in Inland Waters:** H. R. 2234 - An act to amend the rules for the prevention of collisions on certain inland waters of the United States and on the western rivers. (P. L. 232).

**Trade Agreement Authority:** H. R. 5495 - An act to extend the authority of the President to enter into trade agreements under section 350 of the Tariff Act of 1930, as amended, and for other purposes (P. L. 215). This act extends for a further period of one year from June 12, 1953, the authority of the President to enter into foreign-trade agreements under section 350 of the Tariff Act of 1930. Reduces from 1 year to 9 months the period within which the Tariff Commission must make its investigation and report on applications for relief under the escape clause. Establishes a bipartisan commission to be known as the Commission on Foreign Economic Policy.

The Commission is directed to examine, study, and report on the subjects of international trade and its enlargement consistent with a sound domestic economy, our foreign economic policy, and the trade aspects of our national security and total foreign policy; and to recommend appropriate policies, measures, and practices.

#### CONGRESSIONAL REPORTS:

Committee reports on bills reported in this section of interest to the fishery and allied industries available only from the committee submitting the report.

**Trade Agreements Extension Bill of 1953,** House Report No. 1089 (August 1, 1953, 83d Congress, 1st Session), 6 p., printed, conference report to accompany H. R. 5495. The committee on conference on the disagreeing votes of the two Houses on the amendments of the Senate to the bill, recommended the following amendments of interest to the fishing industry: that the enactment of the bill shall not be construed to determine or indicate the approval or disapproval by the Congress of the executive agreement known as the General Agreement on Tariffs and Trade; whenever, in any case calling for findings of the United States Tariff Commission in connection with any authority conferred upon the President by law to make changes in import restriction, a majority of the Commissioners are unable to agree upon findings or recommendations, the findings (and recommendations, if any) unanimously agreed upon by one-half of the number of Commissioners voting may be considered by the President as the findings and recommendations of the Commission (this amendment also provides that if the Commissioners voting are divided into two equal groups each of which is unanimously agreed upon findings, the findings of either group may be considered by the President as the findings of the Commission); whenever, in any case in which the Commission is authorized to make an investigation upon its own motion, upon complaint, or upon application of any interested

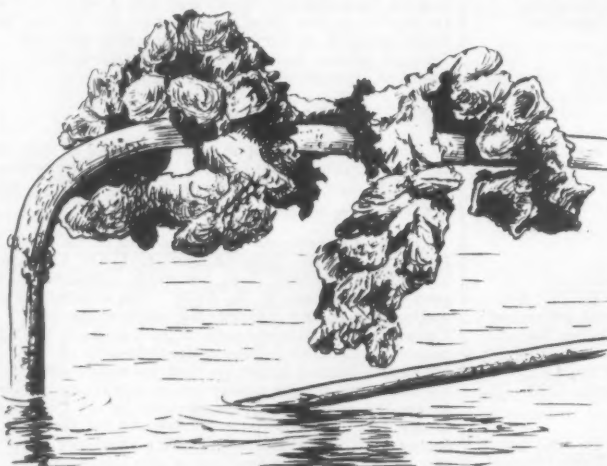
party, one-half of the number of Commissioners voting agree that the investigation should be made, such investigation shall thereupon be carried out in accordance with the statutory authority covering the matter in question, and whenever the Commission is authorized to hold hearings in the course of any investigation and one-half of the number of Commissioners voting agree that hearings should be held, such hearings shall thereupon be held in accordance with the statutory authority covering the matter in question; that a quorum of the Commission on Foreign Economic Policy (established by title III of the bill) shall consist of 4 members

appointed by the President of the United States, 3 members appointed from the Senate by the Vice President of the United States, and 3 members from the House of Representatives appointed by the Speaker of the House of Representatives (any nine members of the Commission would constitute a quorum); the Commission would be directed to examine, study, and report on the subjects of international trade and its enlargement consistent with a sound domestic economy, our foreign economic policy, and the trade aspects of our national security and total foreign policy; and to recommend appropriate policies, measures, and practices.



### OYSTERS THRIVE ON SCRAP IRON

Old iron may scarcely seem a fisheries subject but in one case the iron has produced a small fortune from the oysters which have grown on it, reports the April 1953 Fisheries Newsletter, an Australian Government publication.



THREE-YEAR-OLD OYSTERS GROWING ON HORSESHOES, HUNG ON AN OLD BEDSTEAD END.

A resident of Dunwich, Moreton Bay, in southern Queensland, struck by the remarkable catch on the iron rails used to support the Dunwich baths, and the catch on iron hulks about the Bay, set out a part of his oyster lease with iron cultch.

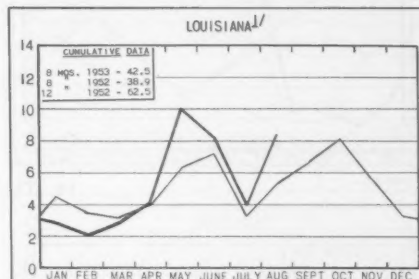
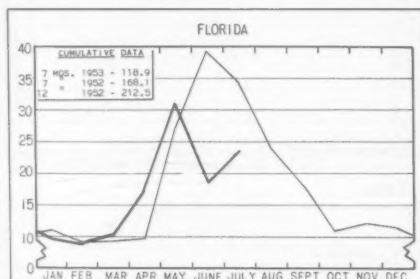
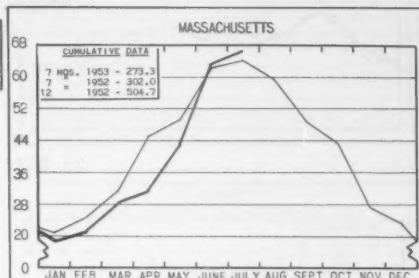
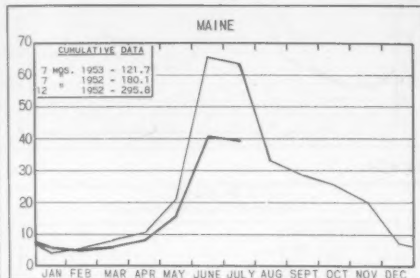
He purchased a number of old iron hospital beds, and these, with horseshoes and old fish-plates, formed the original cultch on his Dunwich leases. So successful were these that he has since used a number of iron materials, particularly conduit and old motorcar springs and motorbike scrap. More recently angle-iron sticks, costing about  $\frac{1}{2}$  U. S. cent each, have been added to the cultch.

The iron can be used for crop after crop, and the oysters are easily removed from it as a result of the inevitable surface rusting.

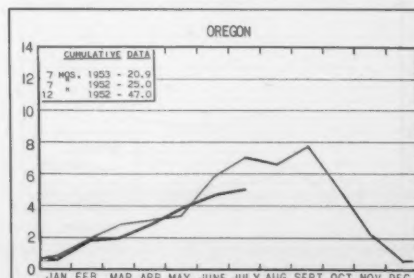
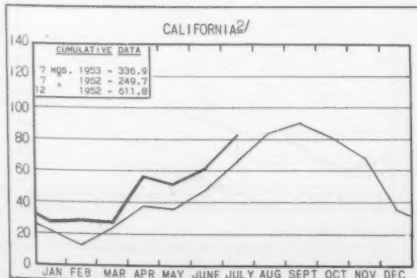
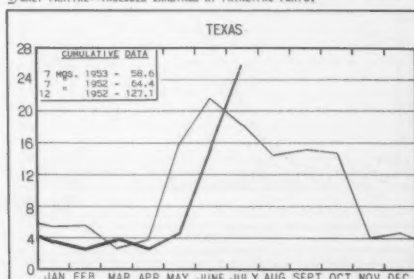
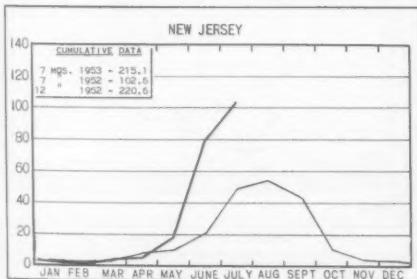
# FISHERY INDICATORS

## CHART 1 - FISHERY LANDINGS for SELECTED STATES

In Millions of Pounds



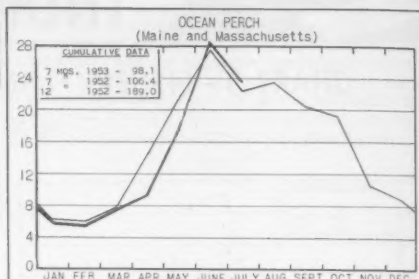
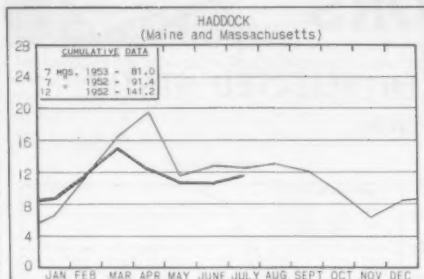
<sup>1/</sup>ONLY PARTIAL--INCLUDES LANDINGS AT PRINCIPAL PORTS.



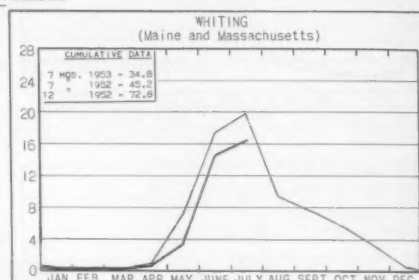
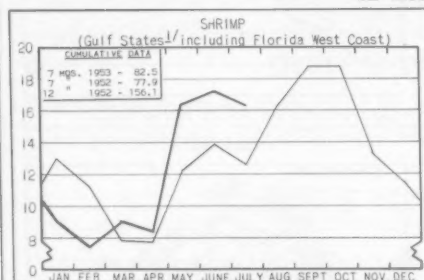
<sup>2/</sup>ONLY PARTIAL--INCLUDES PRODUCTION OF MAJOR FISHERIES AND MARKET FISH LANDINGS AT PRINCIPAL PORTS.

## CHART 2 - LANDINGS for SELECTED FISHERIES

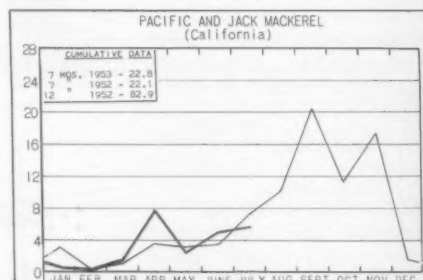
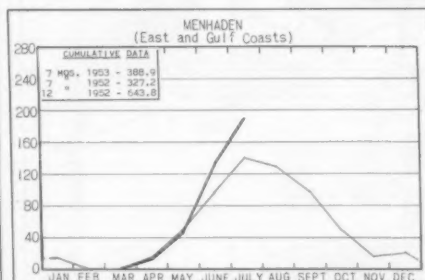
In Millions of Pounds



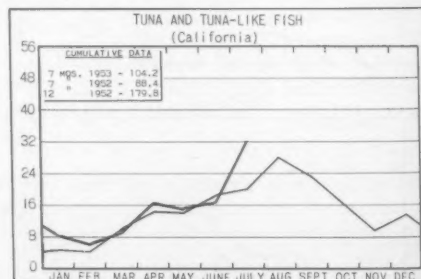
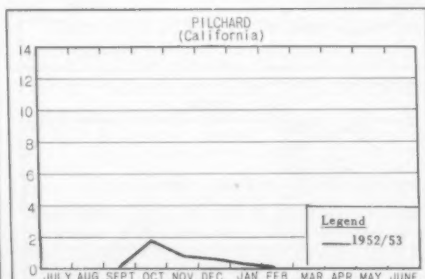
In Millions of Pounds



In Thousands of Tons

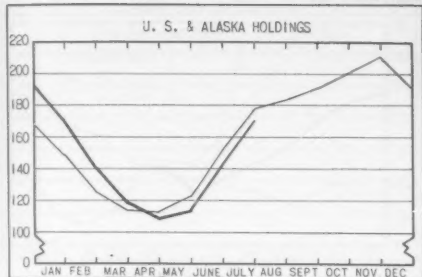


In Thousands of Tons

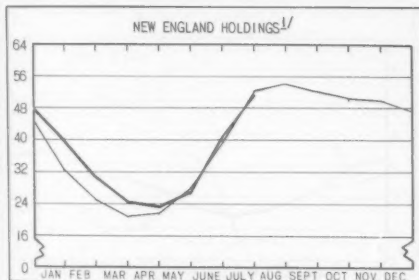
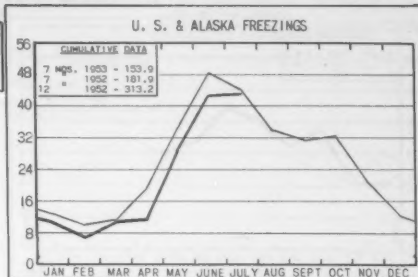


# CHART 3 - COLD-STORAGE HOLDINGS and FREEZINGS of FISHERY PRODUCTS \*

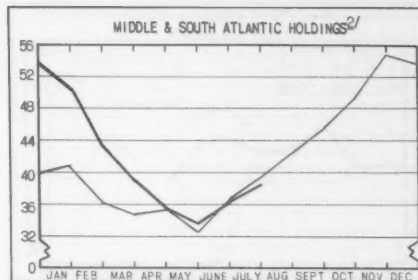
In Millions of Pounds



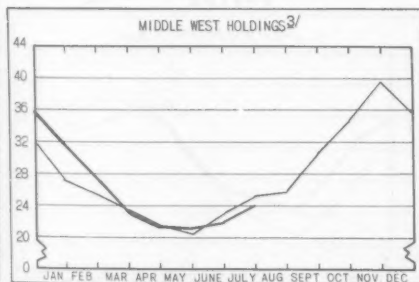
Legend:  
— 1953  
--- 1952



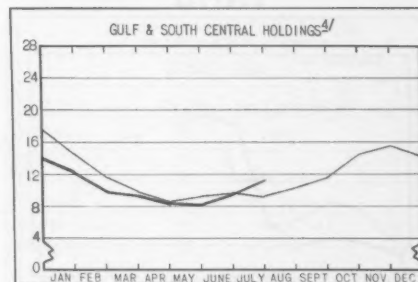
<sup>1/</sup>MAINE, MASSACHUSETTS, RHODE ISLAND, AND CONNECTICUT.



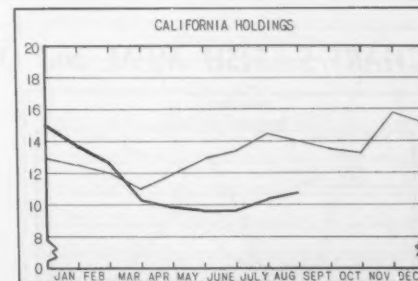
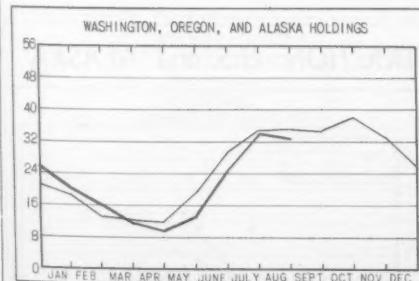
<sup>2/</sup>ALL EAST COAST STATES FROM N. Y. SOUTH.



<sup>3/</sup>OHIO, IND., ILL., MICH., WIS., MINN., IOWA, MO., N. DAK., NEBR., & KANS.



<sup>4/</sup>ALA., MISS., LA., TEX., ARK., KY., & TENN.

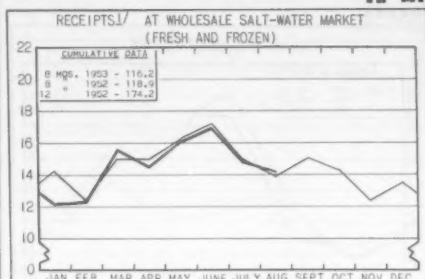


\*Excludes salted, cured, and smoked products.

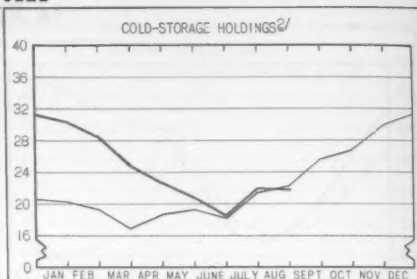


## CHART 4 - RECEIPTS and COLD-STORAGE HOLDINGS of FISHERY PRODUCTS at PRINCIPAL DISTRIBUTION CENTERS

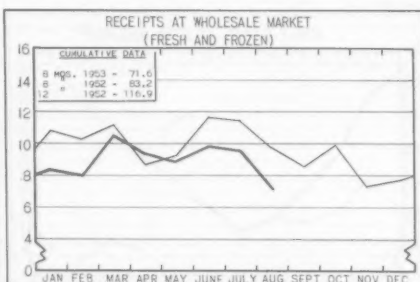
In Millions of Pound



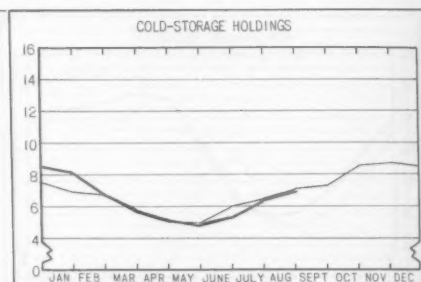
<sup>1/</sup>INCLUDE TRUCK AND RAIL IMPORTS FROM CANADA AND DIRECT VESSEL LANDINGS AT NEW YORK CITY.



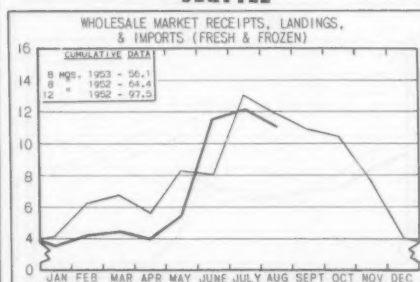
<sup>2/</sup>AS REPORTED BY PLANTS IN METROPOLITAN AREA.



**CHICAGO**



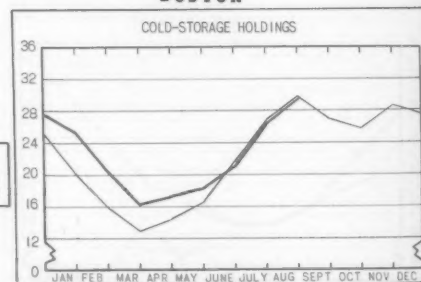
**SEATTLE**



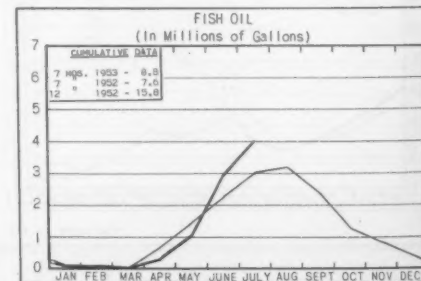
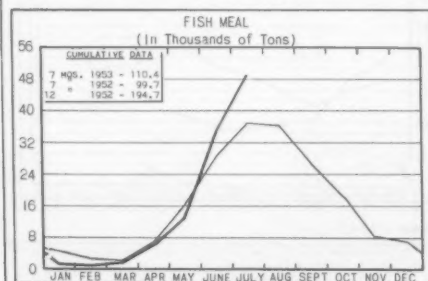
**Legend**

— 1953  
- - 1952

**BOSTON**

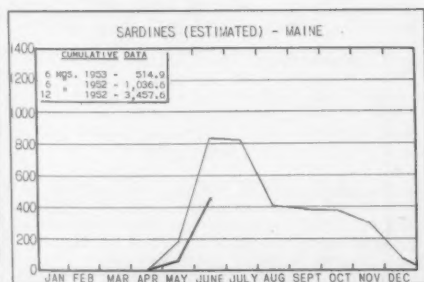
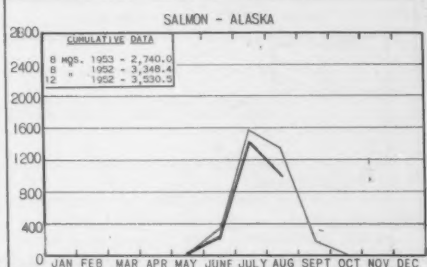
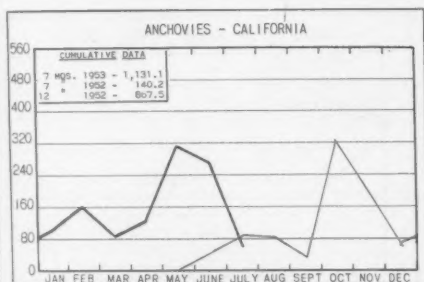
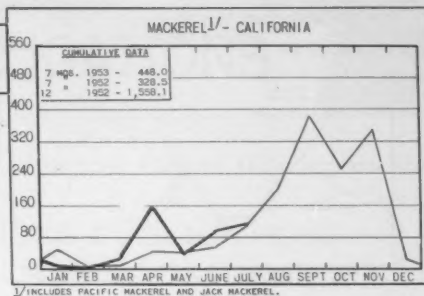
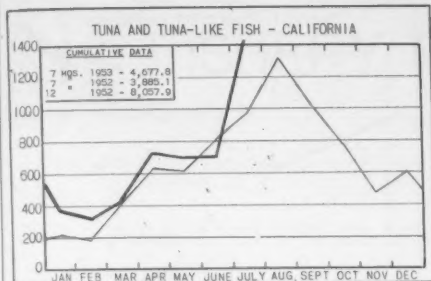


## CHART 5 - FISH MEAL and OIL PRODUCTION - U.S. and ALASKA



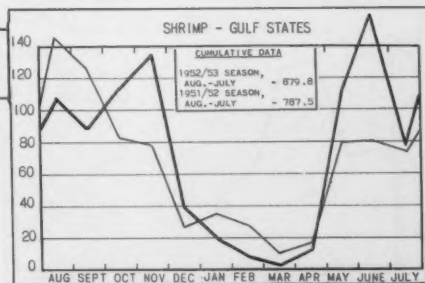
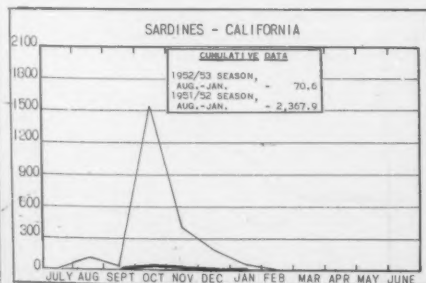
# CHART 6 - CANNED PACKS of SELECTED FISHERY PRODUCTS

In Thousands of Standard Cases



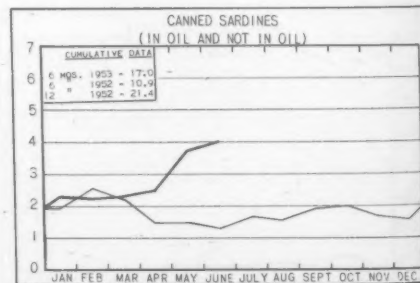
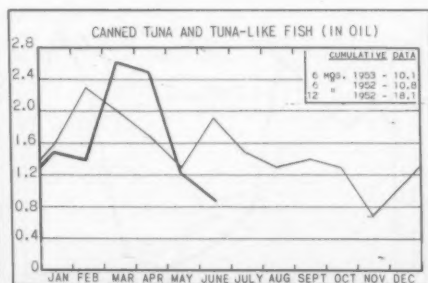
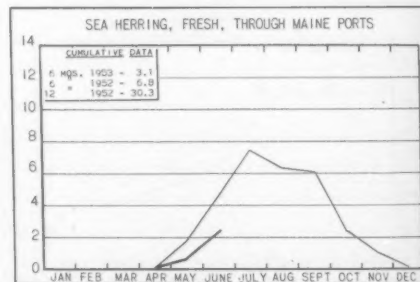
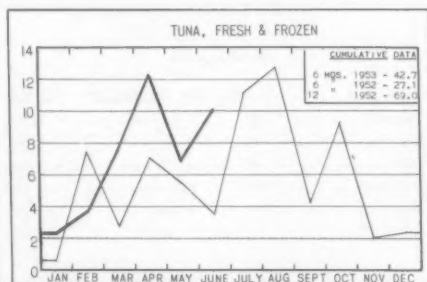
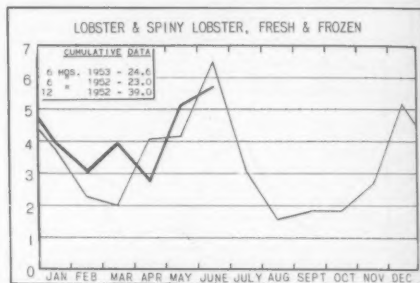
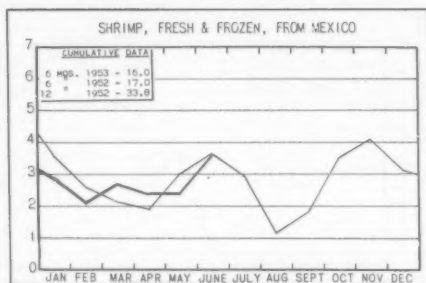
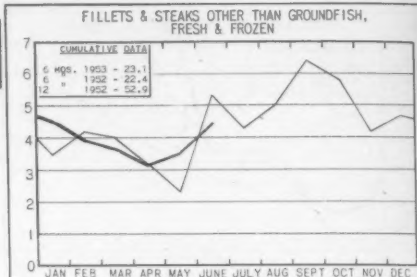
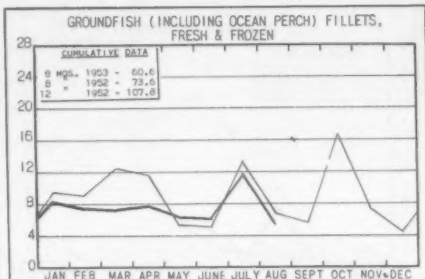
**STANDARD CASES**

Variety	No. Cans	Can Designation	Net Wgt.
SARDINES	100	$\frac{1}{2}$ drawn	3 $\frac{1}{2}$ oz.
SHRIMP	48	—	5 oz.
TUNA	48	No. $\frac{1}{2}$ tuna	6 & 7 oz.
PILCHARDS	48	No. 1 oval	15 oz.
SALMON	48	1-pound tall	16 oz.
ANCHOVIES	48	$\frac{1}{2}$ lb.	8 oz.



# CHART 7 - U.S. FISHERY PRODUCTS IMPORTS

In Millions of Pounds





Recent publications of interest to the commercial fishing industry are listed below.

## FISH AND WILDLIFE SERVICE PUBLICATIONS

THESE PROCESSED PUBLICATIONS ARE AVAILABLE FREE FROM THE DIVISION OF INFORMATION, U. S. FISH AND WILDLIFE SERVICE, WASHINGTON 25, D. C. TYPES OF PUBLICATIONS ARE DESIGNATED AS FOLLOWS:

- CFS - CURRENT FISHERY STATISTICS OF THE UNITED STATES AND ALASKA.
- SSR.-FISH. - SPECIAL SCIENTIFIC REPORTS--FISHERIES (LIMITED DISTRIBUTION).
- SEP.-SEPARATES (REPRINTS) FROM COMMERCIAL FISHERIES REVIEW.

- | <u>Number</u>     | <u>Title</u>  |
|-------------------|---|
| CFS-894           | - Chesapeake Fisheries, 1951 Annual Summary, 4 p.   |
| CFS-896           | - Mississippi Landings, May 1953, 2 p.  |
| CFS-898           | - Fish Meal and Oil, June 1953, 2 p.  |
| CFS-901           | - Massachusetts Landings, May 1953, 8 p.  |
| CFS-904           | - Middle Atlantic Fisheries, 1951 Annual Summary, 7 p.  |
| CFS-905           | - New Jersey Landings, June 1953, 2 p.  |
| CFS-906           | - Frozen Fish Report, August 1953 Final, 8 p.   |
| CFS-907           | - Mississippi Landings, June 1953, 2 p.   |
| CFS-908           | - Maine Landings, June 1953, 4 p.   |
| Sep. No. 355      | - Report on the Norwegian Frozen Fish Fillet Industry.  |
| Sep. No. 356      | - Trap Lift Net for Catching Tuna Bait Fishes.  |
| SSR-Fish. No. 104 | - Survey of the Domestic Tuna Industry, by A. W. Anderson, W. H. Stoltz, and Associates, 451 p., processed, 1953. Specialists of the Fish and Wildlife Service teamed together to produce this detailed report requested by six Pacific Coast Senators. The report pertains to the tuna industry's position in the domestic economy. Subjects covered include: history of the industry; consumption; world production; domestic production; processing; relationship of the industry to the national inter- |

est; distribution; Government assistance in the United States and competing countries; and recommendations for action by both the tuna industry and the Federal Government. Each part covers considerable detail, and it represents the results of exhaustive analysis by experts in specialized fields after having worked for months on the subject. For the principal subjects covered the report contains the following observations: consumption—outlook bright; world production—landings can be maintained and increased; domestic production and processing—prospects of large relative cost reduction rather bleak; distribution—no great prospects of cost savings. The report also contains several recommendations. Many tables and charts, interspersed throughout, provide a wealth of statistical detail on various subjects related to the tuna industry. The report does not purport to contain all economic information for this industry. It refers to a contemporary study completed by the U. S. Tariff Commission which also contains excellent detail, particularly on volume of international trade in the products of this industry, costs of production, etc. Both of these reports taken together will furnish readers with a broad insight into the economics of the tuna industry.

—W. H. Stoltz



## MISCELLANEOUS PUBLICATIONS

THESE PUBLICATIONS ARE NOT AVAILABLE FROM THE FISH AND WILDLIFE SERVICE, BUT USUALLY MAY BE OBTAINED FROM THE AGENCIES ISSUING THEM. CORRESPONDENCE REGARDING PUBLICATIONS THAT FOLLOW SHOULD BE ADDRESSED TO THE RESPECTIVE AGENCIES OR PUBLISHERS MENTIONED. DATA ON PRICES, IF READILY AVAILABLE, ARE SHOWN.

Bibliography of the Noises Made by Marine Organisms, by W. N. Kellogg, American Museum Novitates, No. 1611, 5 p., printed. American Museum of Natural History, New York, March 20, 1953. This is contribution no. 6 from the Florida State University Oceanographic Institute. The author has attempted to bring together the most important references to work which has been done on the production of sound by fishes and crustaceans. Nearly all the work in this field has been carried out since the beginning of World War II when our Navy was particularly interested in listening for enemy ships. Additional sources of underwater biological sounds are continually being discovered, and the field encompasses some of the most exciting developments in marine research in recent years. Fifty-three references are given. The government reports listed are only those which have been declassified.

Commodity Standards for Fishery Products, prepared by Ernest Hess, FAO Fisheries Study No. 2, 163 p., printed, US\$2. Food and Agriculture Organization of the United Nations, Rome, Italy, April 1953. (Sold by Columbia University Press, International Documents Service, New York 27, N. Y.) The report is a digest of standardization regulations, and grading and inspection systems in existence in the various countries of the United Nations. It should be of particular interest to the importer or exporter of fishery products. The book is divided into three main chapters as follows: I. Introduction: A. Previous FAO work; B. International Trade in Fisheries Products; C. International Standardization Efforts. II. Present National Standards: A. Standards of Containers and Packaging; B. Standards of Weights; C. Standards of Quality; D. Standards of Description. III. Control of Production and Trade: A. Control of Production for Export; B. Export Control; C. Import Control. Included are 59 valuable tables covering information on such subjects as: capacity, size, and standards for containers and packages for fresh, frozen, cured, and canned fishery products; grade requirements and standards; standardization of fish meal and oils; requirements for cold storage of fish; etc.

—F. T. Fiskur

Conversions of the Standard Fork, and Total Lengths of the Maine Herring, by Leslie W. Scattergood, Technical Bulletin No. 2, 16 p., illus., printed. Department of Sea and Shore Fisheries, Augusta, Maine, November 1952. This is the fifth report resulting from the Maine sardine or herring (*Clupea harengus*) investigation carried on jointly by the U. S. Fish and Wildlife Service, Department of Sea and Shore Fisheries, Maine Sardine Packers' Association, and the Maine sardine

industry. This report discusses the various methods of measuring the length of a herring, and presents the conversion tables necessary to determine the comparative values of various length measurements.

European Markets for United States Fats and Oils, by Paul E. Quintus, Foreign Agriculture Report No. 75, 33 p., processed. Foreign Agricultural Service, U. S. Department of Agriculture, Washington, D. C., June 1953. Western Europe is the large fat-deficit area of the world, and provides the most important foreign outlet for surplus fats and oils (including fish oils) from the United States. This report summarizes the present market conditions in Austria, Belgium, Denmark, France, Western Germany, Italy, the Netherlands, Spain, Switzerland, and the United Kingdom, and discusses the export prospects for 1953. Among the statistics included in this report are average and annual figures on exports of fish oil, by area and European countries of destination.

"Fisheries of the Indo-Pacific Region, 1951/52," article, FAO Fisheries Bulletin, Jan.-Feb./March-April 1953, vol. 6, nos. 1-2, pp. 27-35, printed, single copy 30 cents. Food and Agriculture Organization of the United Nations, Rome, Italy. (For sale by International Documents Service, Columbia University Press, New York 27, N. Y.) Describes the inland and marine fisheries resources of the Indo-Pacific region, fishing operations, harbor facilities, marketing, processing, trade in fish and fishery products, estimates of production, and government programs. There has been a quickening interest in the fisheries of the Indo-Pacific region during the last few years. The fishermen have become extremely active in effecting a change in their methods and organization, and in consequence important developments have taken place in mechanization of fishing and in the formation of fishermen's associations. National and international programs have contributed substantially towards this development, which has included the provision of equipment, funds, and personnel for the industry and for governmental research, as well as various projects in technical instruction.

Home Freezing of Foods (How to Prepare, Store, Thaw, and Cook Frozen Foods), by Vera Greaves Mirak, Circular 420, 39 p., illus., printed. The College of Agriculture, University of California, Berkeley, Calif. This circular is planned to help the home-maker decide whether or not it is practical to store frozen foods for home use, what methods of freezing storage are available, and what size home-freezing unit is essential. It also gives general instructions in home-freezing techniques; and how to prepare, store, thaw, and cook various kinds of foods (including fish and shellfish). Directions for freezing precooked foods are also included.



THESE PUBLICATIONS ARE NOT AVAILABLE FROM THE FISH AND WILDLIFE SERVICE, BUT USUALLY MAY BE OBTAINED FROM THE AGENCIES ISSUING THEM.

(International Pacific Salmon Fisheries Commission) Annual Report 1952, 39 p., illus., printed. International Pacific Salmon Fisheries Commission, New Westminster, Canada, 1953. A report of the Commission, an international agency, appointed under a Convention between Canada and the United States for the protection, preservation, and extension of the sockeye salmon fisheries in the Fraser River system. Discussed in this report are the various activities of the Commission during 1952, the regulations, the United States fishery, the Canadian fishery, Indian catch statistics, escapement, the 1953 cycle, rehabilitation of barren areas, and general investigations.

"Japan: Pearls to Order," by J. C. Britton, article, *Foreign Trade*, vol. 14, no. 343 (July 25, 1953), pp. 14-16, illus., printed, single copy 10 cents. Department of Trade and Commerce, Ottawa, Canada. (Available from The Queen's Printer, Government Printing Bureau, Ottawa, Canada.) Describes Japan's cultured pearl industry, particularly in the Toba Bay area which is responsible for 50 percent of the world's production. Producing cultured pearls requires continuous day and night supervision for from 2 to 7 years. Even with expert culture, an estimated 20 percent of production will not be marketable, 30 percent will not be suitable for necklaces, and only 10 percent will be top quality. The statistics covering pearl exports show that the United States is by far the largest market for Japanese cultured pearls. However, there are a number of other important markets, including Canada, and the demand is growing in other countries as Japanese cultured pearls become more widely known. The article touches upon the origin and stabilization of the industry.

The Maturity of the Maine Herring (CLUPEA HARENGUS) by Leslie W. Scattergood, Research Bulletin No. 7, 11 p., illus., printed. Department of Sea and Shore Fisheries, Augusta, Maine, December 1952. This report is the sixth of a series concerning the Maine sardine or herring (*Clupea harengus*). It presents further biological observations collected during a cooperative fishery investigation sponsored by the Maine Department of Sea and Shore Fisheries, U. S. Fish and Wildlife Service, Maine Sardine Packers Association, Inc., and the Maine sardine industry. The purpose of this report is to discuss the maturity of the herring with particular reference to the size of the fish.

(MSA) Monthly Report of the Mutual Security Agency to the Public Advisory Board (Data as of April 30, 1953), 109 p., illus., processed. Division of Statistics and Reports, Mutual Security Agency, Washington 25, D. C. Included are charts and tables summarizing important activities under the economic assistance and defense support programs of the Mutual Security Agency and its predecessor, the Economic Cooperation Administration, through April 30, 1953. Charts and appendix tables on the European program cover MSA/ECOA operations beginning with April 3, 1948. Charts and appendix tables on the Far East program cover MSA/ECOA operations under the China Area Aid Act of 1950. A section of the report deals with European industrial projects.

(New York) Forty-first Annual Report of the Conservation Department of the State of New York for the Year 1951, Legislative Document (1952) No. 78, 338 p., illus., printed. New York State Conservation Department, Albany, N. Y. This report gives details of the accomplishments of all branches of the Conservation Department during 1951, which includes, among others, the Bureau of Fish and Wildlife Investigations, Bureau of Fish Culture, Bureau of Inland Fisheries, and Bureau of Marine Fisheries. The Bureau of Fish and Wildlife Investigations maintains five fisheries districts which provide statewide coverage from centers at Rochester, Poughkeepsie, Saranac Lake, Norwich, and Watertown. This decentralized coverage makes it possible to handle field studies of a large number of individual waters each year and to make information available to interested persons or agencies in the interest of developing a progressively more effective management of the waters. Field investigations involve a survey of the New York City water supply; Adirondack trout restoration program; fish population control studies; landlocked salmon study; Mongaup Creek fish population study; trout tagging, WSTR project; Unadilla River marked brown trout experiment; Stillwater Pond study; Cranberry Lake brook trout study; Chataqua Lake muskellunge investigations; and North Sandy Pond pike study. The Bureau of Fish Culture describes the work being conducted at the various fish hatcheries. In order to operate the expanded hatchery facilities, it was necessary to make some changes in hatchery management practices during 1951. The most outstanding advancements were the central refrigeration and freezing plant at Rome, the small electric refrigeration units that were installed in many of the hatcheries, an increase in egg production, early egg production, and the use of blended dry-food ingredients in fish-food diets. The Bureau of Inland Fisheries describes the developments in the commercial fisheries of the Great Lakes and the Hudson River and the Hudson River shad study. The Bureau of Marine Fisheries describes the discovery of a large bed of surf clams in the Atlantic Ocean, the transplanting of hard clams, and the salt-water fisheries. Previous annual reports of the Conservation Department for the years 1949 and 1950, numbered Legislative Document (1950) No. 76 and Legislative Document (1951) No. 48, respectively, have also been issued.

Proceedings of National Food and Nutrition Institute, Agriculture Handbook No. 56, 163 p., illus., processed, 65 cents. U. S. Department of Agriculture, Washington, D. C., July 1953. (For sale by the Superintendent of Documents, Washington 25, D. C.) A report of the proceedings of the National Food and Nutrition Institute which was held in Washington, D. C., on December 8-10, 1952, for the purpose of reviewing nutrition progress and determining ways of strengthening existing nutrition programs. More than 400 representatives of governmental and nongovernmental agencies carrying responsibilities for various phases of current food and nutrition programs attended. Papers presented at the general sessions covered the following subjects: (1) nutrition and health; (2) the national food situation; (3) nutritional health in the United States; (4) nutrition as a factor in disease; (5) food laws and food protection; and (6) emergency food planning. Discussion-group reports are also presented.

THESE PUBLICATIONS ARE NOT AVAILABLE FROM THE FISH AND WILDLIFE SERVICE, BUT USUALLY MAY BE OBTAINED FROM THE AGENCIES ISSUING THEM.

Shellfish Survey Methods, by Robert L. Dow, Technical Bulletin No. 1, 15 p., printed. Department of Sea and Shore Fisheries, Augusta, Maine, November 1952. The three principal survey methods used as a basis for population estimates are discussed: (1) compass and chain; (2) plane table; and (3) photo-enlarged shoreline survey. In 1952 experiments were begun in the use of vertical aerial photographs. The objective of these experiments is to establish a reliable and yet comparatively cheap method of completing an intertidal hydrographic survey which would furnish a basis for population and productivity estimates as well as a record of hydrographic changes occurring from time to time. The accuracy of any survey method is governed by the skill of the manipulator. For one lacking experience and skill in the manipulation of the telescopic alidade, or even in the sketching table, the compass and chain method is more practical, particularly if stakes or rods are used for control purposes in establishing base lines and in turning angles. The selection of method to be used should be made only after a reconnaissance of the area to be surveyed has been made. The plane table, the sketching table, the compass and chain, and the photo-enlarged shoreline survey all have their limitations. Reconnaissance of the area to be surveyed will permit the selection of the method which will give optimum results for that particular area. Discusses the results of estimates where it has been possible to check them with actual production figures. The author points out that it appears from the estimates summarized on a sampling-fraction basis that, if the sampling fraction is approximately 1/12,000 or greater, the error of estimate may be anticipated to be no greater than plus or minus 10 percent. It may further be anticipated that, if the sampling fraction is approximately 1/4,500 or greater, the error of estimate will be no greater than plus or minus 5 percent.

"Some Aspects of Fisheries Development Economics, by G. M. Gerhardsen and G. Beever, Monthly Bulletin of Agricultural Economics and Statistics, vol. II, no. 5 (May 1953), pp. 1-7, printed, single copies 50 U. S. cents. Food and Agriculture Organization of the United Nations, Rome, Italy. The authors have set down on a relatively few pages an interesting article which covers in short, concise form important aspects of the whole range of fishery economics. This is done to stage the setting for their approach to suggestions for development of fisheries in underdeveloped areas. The authors aptly cram much of fisheries economics into a few pages and then make pertinent suggestions as guides or aids to setting up plans for technical assistance in underdeveloped fish-producing areas. The great risk involved in the vagaries of commercial fish production is noted. The tendency for development of large integrated firms to develop in order to lessen risks is observed for highly developed areas. The authors express the opinion that in these areas, the number of small individual operators is likely to decrease and larger organizations to expand their activities as a result of more comprehensive commercial policies and increasing interest of governments. The need for caution in going into the various types of

fish production is appropriately emphasized for underdeveloped areas. It is also noted that there must be some hope that the native operators themselves will respond energetically. These are things which should be carefully observed by any governmental planning agency. The article inspires thought and although some principals set down may be subject to considerable debate, it contains much valuable information.

—W. H. Stoltzing

Studies on Ecdysis in the American Lobster (HOMARUS AMERICANUS), 1. The Lobster Egg as a Source of Estrogenic Hormone, by J. Kenneth Donahue, Research Bulletin No. 8, 7 p., printed. Department of Sea and Shore Fisheries, Augusta, Maine, December 1952. This report, the first of a series of experimental reports, seeks to cast further light on the control of moulting (ecdysis) in the American lobster, *Homarus americanus*. The investigations described in this report give evidence that one of possibly several moulting-controlling factors may reside in the reproductive organs of the female lobster. It would appear that the failure of the mature female lobster to moult while carrying eggs might in some way be related to an inhibitory action by the eggs themselves, an action essentially hormonal. The discovery and separation of a fraction from the lobster egg which, although not chemically identified, exhibits the characteristic behavior of estrogens of mammalian origin is the substance of this report. Includes a chart showing the fractionation procedure adopted for obtaining the best yield for both biological and fluorimetric methods of assay.

United States Imports and Exports of Herring and Sardines in Recent Years, by Leslie W. Scattergood, Research Bulletin No. 6, 51 p., illus., printed. Department of Sea and Shore Fisheries, Augusta, Maine, October 1952. This is the fourth report published by the Maine herring investigation, which was conducted under a cooperative agreement with the Maine Department of Sea and Shore Fisheries, Maine Sardine Packers Association, U. S. Fish and Wildlife Service, and the Maine sardine industry. This report gives statistical data for 1924-50 on the United States import and export trade in herring and sardines. It also discusses some of the factors which have influenced the world-wide sardine and herring markets, such as the pre-World War II depression, the War itself, the changes in consumers' seafood preferences, the developments of new sardine fisheries, the closing of some Eastern European and Asiatic markets, the import restrictions enacted by certain countries, and the increased importance of the United States as a market for foreign-produced sea foods. It covers imports of frozen sea herring, fresh sea herring, smoked or kippered herring, pickled or salted herring, canned herring and sardines (not in oil), and canned sardines in oil. It also covers exports of salted, pickled, smoked, and dry-cured herring and sardines; canned herring; and canned sardines.

"Weakfish Study on Long Island," by Alfred Perlmutter, article, The New York State Conservationist, June-July 1953, vol. 7, no. 6, pp. 6-7, illus., printed. New York State Conservation Dept., Albany, N. Y.

THESE PUBLICATIONS ARE NOT AVAILABLE FROM THE FISH AND WILDLIFE SERVICE, BUT USUALLY MAY BE OBTAINED FROM THE AGENCIES ISSUING THEM.

For the past several years there has been a marked decline in the abundance of gray sea trout (weakfish)—*Cynoscion regalis*—along the shores of Long Island. An intensive study has been started by the New York State Conservation Department in the Peconic Bays and Great South Bay areas to find out, if possible, the reasons for the decline of the gray sea trout and, even more important, to develop management measures designed to bring about a recovery of the fishery. Three-quarters of the expense for this investigation is borne by the U. S. Fish and Wildlife Service under the Dingell-Johnson Act which provides Federal aid in fish restoration. This article describes in detail a typical day's activities at one of a series of research stations located throughout the Peconic-Gardiner's Bay area and the Shinnecock-Moriches-Great South Bay area.

#### TRADE LISTS

The Commercial Intelligence Branch, Office of International Trade, U. S. Department of Commerce,

Washington 25, D. C., has published the following mimeographed trade lists. Copies of these lists may be obtained by firms in the United States from that Office or from Department of Commerce field offices at \$1.00 per list:

Canneries - Chile (May 1953), 3 parts. Part II lists the names and addresses of fish and shellfish canneries, pp. 5-9. Size of firm and types of products packed are indicated; also the estimated annual production for each firm. Part I and III list canneries for other food products.

Canneries - Portugal (May 1953). Lists names and addresses of canneries. Size of firm and type of products packed are indicated. Fish canners are included.

Commercial Fishing Companies and Fish Exporters - Philippines (May 1953). Lists names and addresses of fishing vessel owners, and the number and type of vessel each operates.

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Editorial Assistant--Ruth V. Keefe

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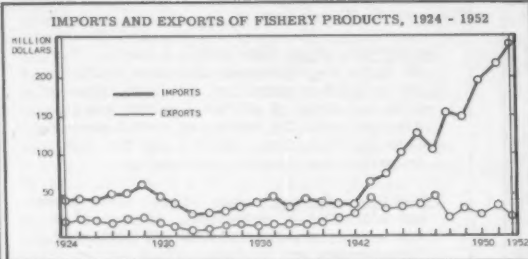
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Pages 5 & 6--Staff of Exploratory Fishing and Gear Development  
Section field office at Seattle, Washington.

## IMPORTS AND EXPORTS OF FISHERY PRODUCTS 1948-1952

Imports and Exports of Fishery Products, 1948-1952, C. F. S. No. 889, is a 7-page bulletin covering the United States foreign trade in fishery products and by-products for the years 1948 through 1952. Both imports and exports are listed by commodity. The quantity and value for each commodity are given. The report includes a historical table listing the

total imports and exports of edible and nonedible fishery products for 1924 through 1952.



United States foreign trade in fishery products and byproducts in 1952 was valued at \$262,375,598--6 percent more than the previous year. Imports valued at \$240,428,817 were 13 percent greater and exports valued at \$21,946,781 were 39 percent less than in 1951.

Imports amounted to 705,118,225 pounds of edible fishery products, valued at \$183,120,813; and nonedible products were valued at \$57,308,004. Among the important items received in much greater volume than in 1951 were fresh or frozen salmon, swordfish, tuna, and groundfish and other fillets.

Exports totaled only 62,055,973 pounds of edible fishery products, valued at \$15,510,784; nonedible products were valued at \$6,435,997. Exports of canned fish and shellfish decreased from 156.3 million pounds in 1951 to 55.2 million pounds in 1952, and the quantity of fish oil exported decreased 12 percent in the same period.

Copies of C. F. S. No. 889 are available free upon request from the Division of Information, U. S. Fish and Wildlife Service, Washington 25, D. C.

Michigan 128D

Ann Arbor.

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DEPARTMENT OF THE INTERIOR  
FISH AND WILDLIFE SERVICE  
WASHINGTON 25, D. C.  
OFFICIAL BUSINESS

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